DOCUMENT RESUME

ED 353 373 CE 062 749

TITLE City Works. Modules One-Five.

INSTITUTION Rindge School of Technical Arts, Cambridge, MA.

PUB DATE 91

NOTE 129p.; Module Four was merged with Module Five by the

developers.

PUB TYPE Guides - Classroom Use - Instructional Materials (For

Learner) (051)

EDRS PRICE ifF01/PC06 Plus Postage.

DESCRIPTORS Academic Education; *Community Development; Community

Resources; Education Work Relationship; *Experiential Learning; *Integrated Curriculum; Learning Modules; Lesson Plans; Secondary Education; Teaching Methods;

*Urban Planning; *Vocational Education

IDENTIFIERS *CityWorks

ABSTRACT

CityWorks is a course offered at the Rindge School of Technical Arts, open to all ninth-grade students in Cambridge, Massachusetts. During the course, students investigate Cambridge's neighborhoods, services, and industries; they make maps, take photographs, draw blueprints, build models, make videotapes, and write oral histories. The focus is on building problem-solving abilities, learning teamwork and communication skills, conducting projects that are useful to the community, and learning about a variety of tools and media. The modules in this package cover these aspects of the CityWorks course: introduction to CityWorks and the skills that will be developed, walk around the block, exploratory projects, and community development. Modules include content outlines, projects, informative handouts, and worksheets. (KC)

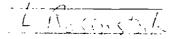


^{*} Reproductions supplied by EDRS are the best that can be made from the original document.

U.S. DEPAR IMENT OF EDUCATION
THE elit Education at Research and Improvement EDUCATIONAL R SOURCES INFORMATION CENTER (ERIC)

- f this document has been reproduced as received from the person or organization originating to
- in land the state of the state
- Prints of view in ripinions stated in this flow in ment do not the lessality represent lists a CEE position of the list of the position o

PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY



TO THE EDUCATIONAL RESOURCES INFORMATION I ENTER (ERIC)

CityWORKS

CityWorks is a draft curriculum being developed for:

The Cambridge School Department

159 Thorndike St. Cambridge, MA 02141

In conjunction with:

RINDGÉ SCHOOL OF TECHNICAL ARTS

459 Broadway Cambridge, Ma 02139

© CityWorks 1991

Superintendent of Schools Mary Lou McGrath

Assistant Superintendent for Administration Patrick J. Murphy

Assistant Superintendent for Curriculum and Instruction Sandra J. Spooner

Executive Director of RSTA

Larry Rosenstock

Written by Adria Steinberg David Stephen

We gratefully acknowledge the teachers and counselors of the Rindge School of Technical Arts for their ongoing assistance and participation in the development of the CityWorks curriculum.

Module 4 was merged with module 5.



CityWorks - September Outline

First Day:

Friday-11 Recap Thompson Island trip, Intro. to Cityworks Class, Problem Solving

Exercise.

Week One:

Mon-14 LEARNING PROBLEM SOLVING SKILLS: Intro to CityWorks.

Ground rules, Syllabus, Grading, Problem Solving Exercise, Request

materials for Egg Drop Exercise.

Tues-15 WORKING AS A TEAM: Do indivdual resume and work team

inventory.

Weds-16 Egg Drop Exercise.

Thurs-17 Egg Drop Exercise.

Fri-18 Egg Drop.

Week Two:

Mon-21 COMMUNICATE WELL, INTERVIEWS: Do individual interviews

and introductions.

Tues-22 COMMUNICATE WELL, WRITING: Introduction to journal writ

ing. entry on Egg Drop.

Weds-23 KNOWING ALLASPECTS: Tour of shop with all aspects "sports and

music" webs. LEARNING TO USE MATH ON THE JOB: Examples

of math used in shop being visited.

Thurs-24 KNOWING CAMBRIDGE'S RUSOURCES: Cambridge quiz and

discussion of key landmarks. Voting on community teen, and fantasy

landmarks.

Fri-25 PRODUCING HIGH QUALITY WORK: Intro to shapes. Making

shapes.

Week Three:

Mon-28 Building a landmark.

Tues-29 Building a landmark, locate on floor map and guess identity, fill out

portfolio record forms.

Weds-30 Intro to portfolio.

Thurs-1 Designing and constructing portfolio.

Fri-2 Decorating portfolio.

Week Four:

Mon-5 Portfolio.

Tues-6 Portfolio.

Weds-7 Portfolio wrap-up and exhibit.

Thurs-8 Portfolio Record Form write up on portfolio.



Welcome to CityWorks

A class where you learn to use your hands and your heads.

CityWorks is a class in which you will learn about who lives and works in Cambridge, as well as learn life skills which prepare you for further vocational studies and the work world. During the year you will be introduced to many of the industries which are taught at Rindge School of Technical Arts (RSTA). In CityWorks each student will work with a number of different RSTA teachers and teams of other students. The school year will be divided into the following projects:

- 1. Skills for the Workplace (Sept. 14 Oct. 9)
 An introduction to important communication, technical and academic skills needed for the work place.
- 2. Cambridge Study: Walk Around the Block (Oct. 13 Nov. 6)
 An investigation of the neighborhood surrounding the high school.
- 3. Cambridge Study: CRLS Close-up.
 (Nov. 9 27)

 A look at CRLS as a part of the major industry in Cambridge education. How does it function as a workplace?
- 4. Exploratory Projects /Building the Room.
 (Nov. 30 March 12)

 An introduction to three different shops offered at RSTA with a project in each to help introduce the skills and tools of the trade.
- 5. Community Development Project
 (March 15 June 4)
 The creation of new buildings and services to be located in
 Cambridge based on an assessment of community needs.



Working Well with your Heads and Your Hands

CityWorks Goals

1. Learn Problem Solving Skills.

The ability to think through and test out alternative solutions to a problem is important in school and in the workplace.

2. Work as a team.

A good team works together to combine each player's skills to insure good performance. Team members show each other mutual respect.

3. Communicate well.

Being able to communicate ideas and information to fellow workers and employers is essential in the workplace. Information can be communicated in many different ways such as: writing, drawing, interviewing, and presentation.

4. Know "all aspects" of an industry.

Production skills are only part of what is involved in Cambridge industry. In addition to technical skills, it's important to understand about planning, management, finance, safety, labor, and community issues.

5. Learn to use math on the job.

Doing careful and accurate work in <u>any</u> industry requires an understanding of measurement systems and basic math.

6. Know Cambridge's resources and needs.

As students and workers in Cambridge, it is important that you know about the city's neighborhoods, residents, and industries. What can they offer you, and what can you offer them?

7. Produce high quality work.

Working carefully to produce high quality work lets you take pride in what you have done. Keeping accurate portfolio records of the work you do allows a teacher or employer to see first hand the skills which you have developed.



CityWorks Grading

CityWorks teachers will review each students progress on a weekly basis. The grade that you receive in CityWorks at the end of each quarter will be based an evaluation of your performance in the following areas:

Finished Project / Completion of Assignments - All assignments given will be graded and must be stored in portfolios.

Attendance - You are expected to come to class on time, everyday, with no unexcused absences.

Effort - This means using class time well and doing your best on assignments.

Attitude - A good attitude means coming to class ready to learn and willing to try new things.

Cooperation - Cooperation includes showing respect to the teacher and class-mates, working well with team-mates, observing all safety rules, and helping to clean up.

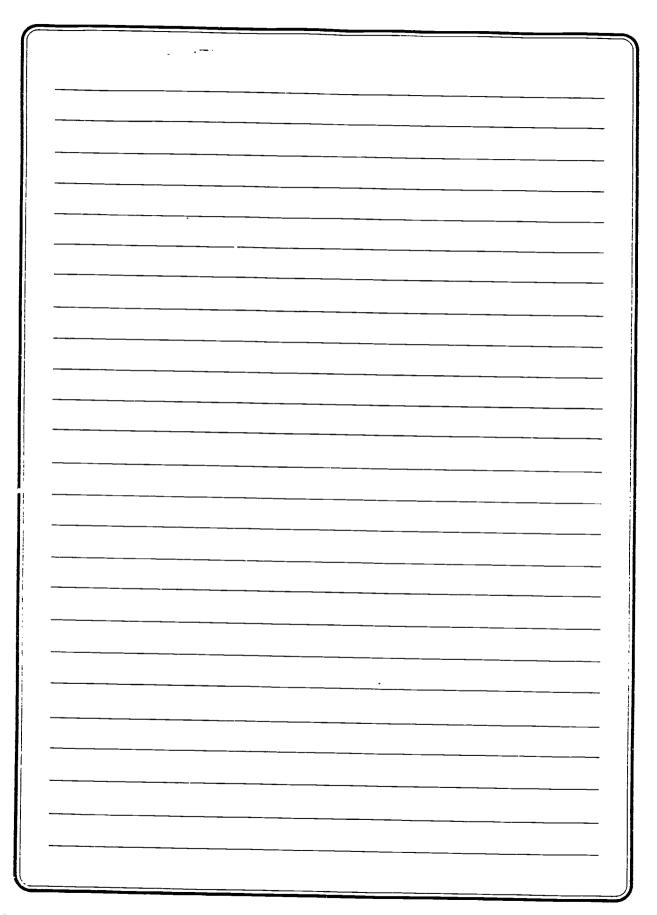


CityWorks Grading Form - First Quarter **Student Name:** Teacher: Assign each student a rating from 1 to 4 for the following categories. Ratings are as follows: 1 = Excellent, 2 = Good, 3 = Fair, 4 = Poor. Finish Product Week Ending ____ Projects: # of tardies or unexc. absences Week Ending _____ Projects: # of tardies or unexc. absences Week Ending _____ Projects: # of tardies or unexc. absences



Student Name: Date: Theme:	CityLog







1. Learning Problem Solving Skills

The ability to think through and test out alternative solutions to a problem is important in school, at home, and in the workplace. By taking a step by step approach to looking at the various parts of a problem you can imagine what the different solutions might be, then begin to test each one to see which works best. In CityWorks many of the projects that you will work on over the course of the year are like puzzles which have more than one solution. You will be asked to work individually and in groups using skills such as writing, math, drawing, and building in order to arrive at a solution that you think works well.

Try some of the problem solving puzzles in this package. Be open minded about different ways to approach and solve the problem.



2. Working as a Team

A good team works together to combine each player's skills to insure good performance. Team members show each other mutual support and respect. They take responsibility for participating in the group effort and completing their particular job as well as they can. Being able to offer and receive constructive feedback is very important.

In order to get an idea of the different kinds of skills each member of your team brings to the group, you will be working individually to complete a personal "resume", then as a group to complete a "work team inventory".



12

CityWorks Resume

Because each of you already has a variety of different skills and experiences which you bring to the group it is important to take an inventory of them. A "resume" is a listing of all your interests, skills, and work experience to date. It is something which all employers look for when you apply for a job, and should show you in your best light. Your City Works Resume will be good practice for writing a work resume, in fact you will be using it at the end of the year to apply for the industry group you would like to work with next year. You will have the chance to add to it as the year goes on and you aquire new skills and experiences.

When filling out the resume think about all the things that you have done up until now which help to prepare you for the work world. Don't sell yourself short! There are a lot of things which you already know how to do. These could include being bilingual (speaking more than one language), doing day care (taking care of younger brothers or sisters), landscaping (mowing the lawn or gardening), doing secretarial work, or having helped a relative to paint or build something. If you are having trouble coming up with ideas then ask your team leader.

The Egg Drop Exercise

In the Egg Drop Exercise you can work individually or in small groups. The goal of the exercise is to create a container for an egg which, when dropped from a height of twenty feet, will protect it from breaking. If you are working as a group try to help each other to think of new ideas and expand on those that you already have.

Instructions:

Bring in materials from which to create a container for an egg which, when dropped onto cement from a height of 20 feet, will prevent it from breaking. Any materials are permitted. Some materials will be provided. Suggested materials are:

styrofoam plastic string cardboard/boxes rubber bands straws egg cartons tape foam cloth tissue paper rugs toilet paper

Work individually or in teams of 2 or 3 to create your container. You may want to try several solutions. You will have two days to complete this exercise.

All the containers will be dropped from a third floor window and those which land without the egg breaking will be eligible for prizes. T-shirts will be awarded to those students who have designed the containers which are judged by the class to be:

- 1. The lightest
- 2. The smallest
- 3. The most ingenious
- 4. The weirdest



3. Communicating Well: Speaking

Being able to communicate ideas and information well is very important in all areas of life: at home, at school, and at work. In CityWorks you will get the chance to learn about different ways of communicating such as writing, drawing, and speaking.

Speaking well takes practice. It's not always as simple as saying whatever comes to mind. In the work world it's important to learn to speak clearly and simply in order to get your information across as directly as possible. It also helps to listen attentively to information being given to you. When speaking to people such as clients or employers it is valuable to know how to ask and answer questions, especially when you are in a job interview. Looking at people when you talk to them also improves communication.

The following exercise will give you the opportunity to think about and practice the kinds of skills that will help you to speak well. You will interview, and be interviewed by, one of your teammates. After you have finished you will both introduce each other to the rest of the group.



3. Communicating Well: Writing

Writing is another skill which is essential in the work place. It helps you to express your opinions and organize your thoughts. Learning how to write in a clear and simple manner takes practice, but it's worth the time and effort. One good way to approach writing is to think about what you would like to say, form the sentence in your mind, then write it down.

In CityWorks you will be keeping a writing journal called a CityLog in order to describe what you are working on in the class, as well as to record your thoughts about specific learning experiences. Your CityLog will not be graded on spelling and punctuation, and you can write in a language other than English if you find that it helps you. Your CityLog will be read by your team leader who will write comments back to you about what you have written. You will be expected to finish a specific number of CityLog entries by the end of each marking period. The purpose of your CityLog is for you to communicate what you have learned or are thinking about. Try to write freely and in your own voice.

In this exercise you will start your CityLog with a writing assignment about the Egg Drop Exercise that you worked on last week.



- 4. Knowing "all aspects" of an Industry
- 5. Learning to use math on the job.

The industries taught at RSTA are like the music and sports industries. In addition to technical and production skills, each has many aspects which are important to learn about, as well as related skills which will help you in the field. Some aspects of industries that are common to sports, music, and the shops are: planning, management, finance, safety, labor, and community needs, and production. The "all aspects" charts which you are given will help you to see how these different aspects are connected.

Math skills are used in every industry and trade. Having good basic math skills will help you do everything from simple measuring to putting together a budget or cost estimate.

In today's CityWorks class you will be visiting your team leader's shop and discussing it's various aspects as well as thinking about the ways in which math is used in that industry.



Student Name : _____ Teacher: Industry (Fill in name of industry) Tech and Pro-Health, Safety duction Skills and Environment **Underlying Principles** Labor of Production Management Community **Finance** Planning

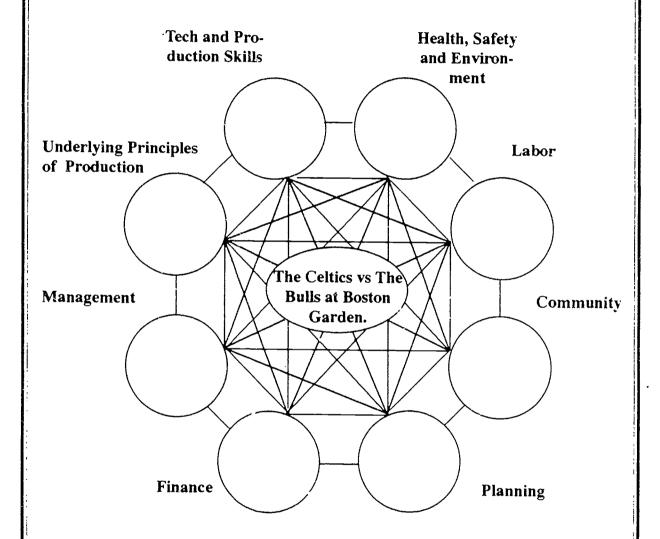
All Aspects Web

Use this form to fill in descriptions of things associated with the industry which you are visiting and which fall into the all aspects categories listed outside of each circle.



Sports Teams

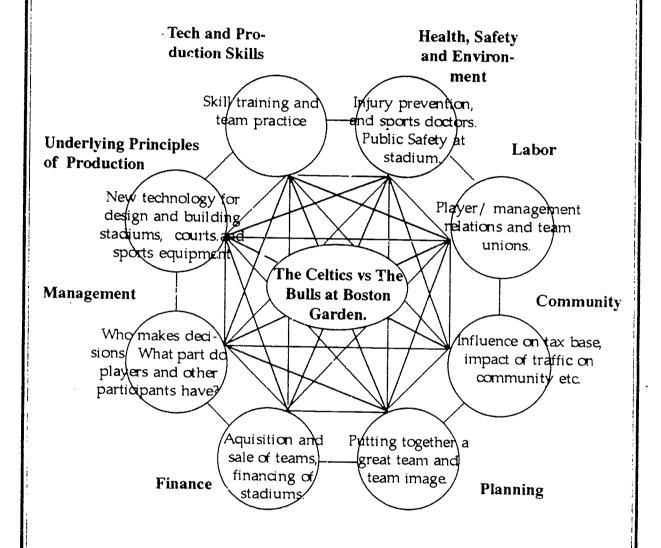
Student's Worksheet



All Aspects Web

Sports Teams

Teacher's Worksheet



All Aspects Web

6. Knowing Cambridge's resources and needs.

As students and workers in Cambridge it's important that you know about the city's neighborhoods, residents, and industries. Who lives and works in Cambridge? What can the city offer you, and what can you offer the city?

In this Cambridge Quiz see how much you know, or can guess, about the neighborhoods, industries and ethnic groups which exist in Cambridge. Later you will be brainstorming about what new landmarks, buildings and services that you would like to see located in Cambridge and put on the large wall map in the CityWorks room.

When Cambridge was first settled in 1620 what was it's original rame?
How many people live in Cambridge?
What percentage of the people who live in Cambridge are students.?
Cambridge is racially and ethnically diverse. What percentage of the residents of Cambridge are: White(non-hispanic)? Black? Hispanic? Asian?
List 4 of the nationalities represented by people who live in Cambridge
List 4 of the nationalities represented by people who live in Cambridge List the names of 4 neighborhoods in Cambridge: What are some of the nicknames for neighborhoods in Cambridge? List
List 4 of the nationalities represented by people who live in Cambridge List the names of 4 neighborhoods in Cambridge: What are some of the nicknames for neighborhoods in Cambridge? List two.
List 4 of the nationalities represented by people who live in Cambridge List the names of 4 neighborhoods in Cambridge: What are some of the nicknames for neighborhoods in Cambridge? Li



CityWorks Skills - Quiz Answer Sheet

6. Knowing Cambridge's resources and needs.

As students and workers in Cambridge it's important that you know about

1. When Cambridge was first settled in 1620 what was it's original name? Newtowne

- 2. How many people live in Cambridge? \pm or \pm 95,000
- 3. What percentage of the people who live in Cambridge are students.? % 25
- 4. Cambridge is racially and ethnically diverse. What percentage of the residents of Cambridge are: White(non-hispanic)? % 65 Black? % 13.5 Hispanic? % 7 Asian? % 8.4
- 5. List 4 of the nationalities represented by people who live in Cambridge: Irish, English, Italian, Portuguese, German, Russian, Hatian, Central American, Southeast Asian, Cape Veridian
- 6. List the names of 4 neighborhoods in Cambridge : Mid-Camb, North Camb, East Camb, West Cambridge, Cambridgeport, Riverside, Mt. Auburn, Cambridge Highlands, Aggaziz, Harvard Sq., Central Sq. Porter Sq., Kendall Sq., Fresh Pond, Lechmere, Avon Hill, Alewife.
- 7. What are some of the nicknames for neighborhoods in Cambridge? List two? The Port, The Beach, The Ave, The Coast, The Mission.
- 8. Who is the top employer in Cambridge? Harvard 10,500 Employees.
- 9. What percentage of Cambridge residents work in the trades? % 16
- 10. List 4 industries which are located in Cambridge?

 Educational, Government, Tourist, Construction, Retail, Medical, Hotel,
 Research and Development, Engineering, High Tech (Computer).



Student Name:	Date:
	lge's Resources and Landmarks
a monument, a landform, a work of art, Cambridge has many landmarks. The Cambridge landmarks they think are the to teens. The top ten most frequently	where you are. It can be a home, a sign, a public building, a gathering place etc CityWorks class will be voting on which he most important to the community and selcted landmarks in each group will be yWorks room and wired so that they light
Take some time to think about the diffe Cambridge and think are important. L	erent iandmarks that you know about in ist your choices to place your vote below.
Community Landmarks	Teen Landmarks
1	1



Now think of what knids of buildings, services, and landmarks don't exist now in Cambridge but would be great to have here. These can be your fantasy landmarks. For example, you could have a giant sports stadium like the new proposal for Boston Garden, or a teen discotech, or a lake for swimming in the summer and skating in the winter. List your fantasy landmarks below.

Fantasy	Landmarks
1 anasy	Landinary

1.						
		_		 _		_

- 2. _____
- 3.
- 4.
- 5.



7. Producing High Quality Work

Everyone is capable of producing high quality work. This means working carefully, persistently, and skillfully to create a product that you can take pride in. In CityWorks you will be doing many different projects, using a variety of materials and technical skills. Photographs and records of all the work you do will be kept in a cardboard folder that each of you make called a portfolio.

In this project you will be making paper models of landmarks in Cambridge. First you will be learning how to make 3 -dimensional shapes using paper. Then you will make larger shapes out of construction paper. Finally you will decorate and carefully assemble those shapes in order to make a model of a landmark of your choice.



45

Student Name:	 Date:	

City Shapes

Before building your model you will learn about shapes and how to draw and construct them in two and three dimensions. Two-dimensional shapes are flat while three-dimensionnal shapes have, or appear to have, depth. The ability to work with shapes is essential an all the industries. It allows you to design and create three-dimensional objects and helps you to read instructional diagrams, drawings, and blueprints.

Complete the following exercises:

1. Recognizing Shapes

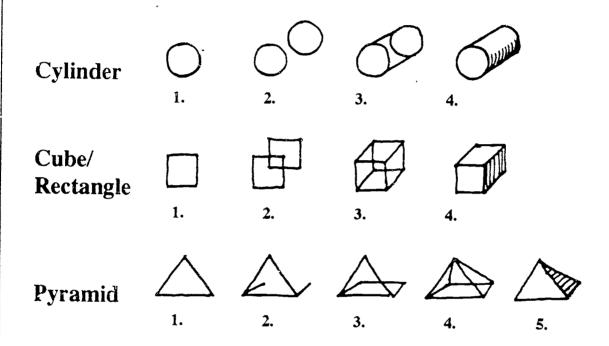
Write the name of all the two and three dimensional shapes drawn below in the space provided to the right of each shape.

\bigcirc		
\triangle	44	
	•	



2. Drawing Shapes

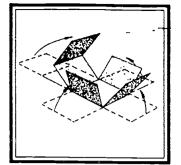
Now try converting two-dimensional circles, squares, rectangles, and triangles into three-dimensional cylinders, cubes, rectangular solids, and pyramids. Use ablank piece of paper to practice drawing shapes in three dimensions by following the steps numbered below.



3. Building Shapes

Choose 4 out of the 8 different shape patterns supplied. Cut each shape out along the solid lines and fold them along the dotted lines in order to create three-dimensional shapes. Use rubber cement, tape, or glue to secure the tabs and make the shape stick together.

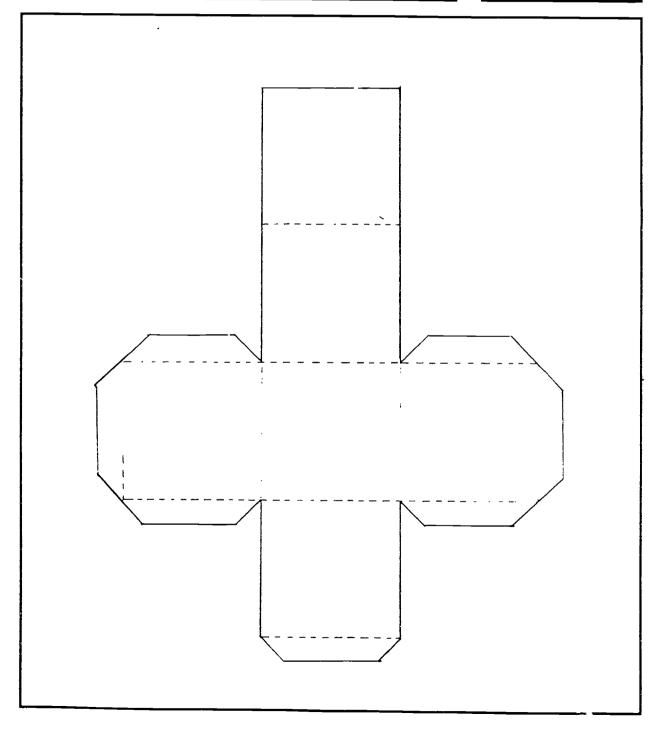




Cube

City (). Shapes

Handout 1





Building a Landmark

In this exercise you will use three-dimensional shapes to build a model of a landmark. Using the lists that you made the other day, select one of your community, teen, or fantasy landmarks. Which one would be the most interesting to build out of construction paper? Try to think of a model that would use at least two or more of the shapes that you've learned to build. You may need to invent shapes of your own or combinations of shapes.

Your first step will be to lay out the patterns on construction paper for the shapes that you will need for your model. You can make the model as small or large as you like and you can draw windows, doors, or any other details that are appropriate, using magic markers, pencils, or pens.

When you've finished your model you will be locating it on the floormap in the CityWorks room along with landmarks from every student. Each team will try to guess what and where each landmark is. The team which guesses the most landmarks will win a prize.



The CityWorks Portfolio

Since you will be working to produce high quality work in the CityWorks class, you will need a place to put it all! Each of you will be making a folder, called a "portfolio", in which to store the projects which you have completed or are working on. These projects will include: maps, drawings, photographs, writing logs, portfolio record forms, and worksheets. Your portfolio is the first thing that your teachers, your parents, and other people will see when they visit the class, so you want to make sure to keep it up to date and take care of it well.

Your portfolio will be made out of cardboard and will have your photograph and name on it's cover in addition to any other images which you would like to draw on it. Last year's portfolios were very varried and creative, maybe they will give you some ideas. The first step will be for you to design and construct your portfolio using cardboard, then you will have the opportunity to decorate it.



Designing your CityWorks Portfolio

This year's CityWorks portfolios can be smaller than last year's. Each of you will be given a sheet of cardboard 32" x 40" from which you can design your own portfolio. The only limitations you have are that each portfolio must:

- 1. Have a handle
- 2. Be large enough to fit a sheet of paper $11'' \times 17''$
- 3. Be taped on it's sides with duct tape to prevent its contents from falling out.

Look at some of last year's portfolios, as well as the examples of other ones that your team leader shows you, then work on designing your own using a sheet of 8-1/2" x 11" paper and the cut-out rectangle at the bottom of this piece of paper.

The cut-out rectangle below represents the size of the 11" x 17" work sheet that must fit inside your portfolio when it's reduced to a size where every inch in real life equals 1/4". The 8-1/2" x 11" paper represents your sheet of cardboard.

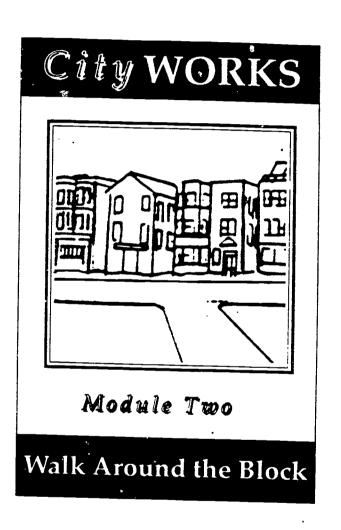
Fold, cut, and shape the larger sheet to create the type of portfolio you would like, while making sure that the small rectangle fits inside it. Try making a few different kinds of portfolio shapes and sizes so that you can choose the one you like best.

11" x 17" Worksheet

To fit inside portfolio.

Cut out this rectangle along the solid line. It represents a work sheet that is 11" x 17", where every inch in real life is equal to 1/4" on this sheet.







Study Block Interview Form					
Date : Location :	7	7	E	4	
Background Information : Sex: (F) Female, (M) Male					
Age: 0-10 yrs, 10-20 yrs, 20-30 yrs, 30-50 yrs, 50 yrs or older,					
Ethnic Background: Afro-American, Hispanic, Asian, Caucasion, Other.		-			
Questions:					
 Do you walk down this block often? If yes, why? If no, then what brings you here today? 					
2. Do you work near here? - If yes then what do you do for work?					
3. Do you, or did you go to school near here? - If yes then what school(s)?					
4. Have you ever been inside CRLS? (yes or no)- If yes then what did you do there?					
·					



Walk Around the Block

Presentation Board Layout



When your team has done all the outside investigations of its' study block, you will be working together to display all your findings on a presentation board. Your teams' presentation board will be exhibited in the CityWorks gallery and possibly in one of the display cases outside of the main office. Think about the different kinds of information which you have gathered and how you would like to present it. Are there certain things that you observed about your study block that you would like '9 emphasize? What colors would you like to use?

The Sample Presentation Board layout shows one example of how your group might arrange its' information. There are also examples of presentation boards that the CityWorks teachers did last year on exhibit in the CityWorks Gallery.

Work together with your team to brainstorm about ideas of how to layout your presentation board. Draw these layouts on the blackboard in your studio. When you arrive at a layout that you and your teammates decide that you like, then each of you must draw it in the space provided on the back side of this handout. Keep the sample layout in your portfolio folder to refer to when you are making the board.



Walk Down the Block



Now use your pace to measure the dimensions of your studio space. Multiply the number of paces for each dimension by the number of feet and inches in your pace to find the measurement in feet and inches.

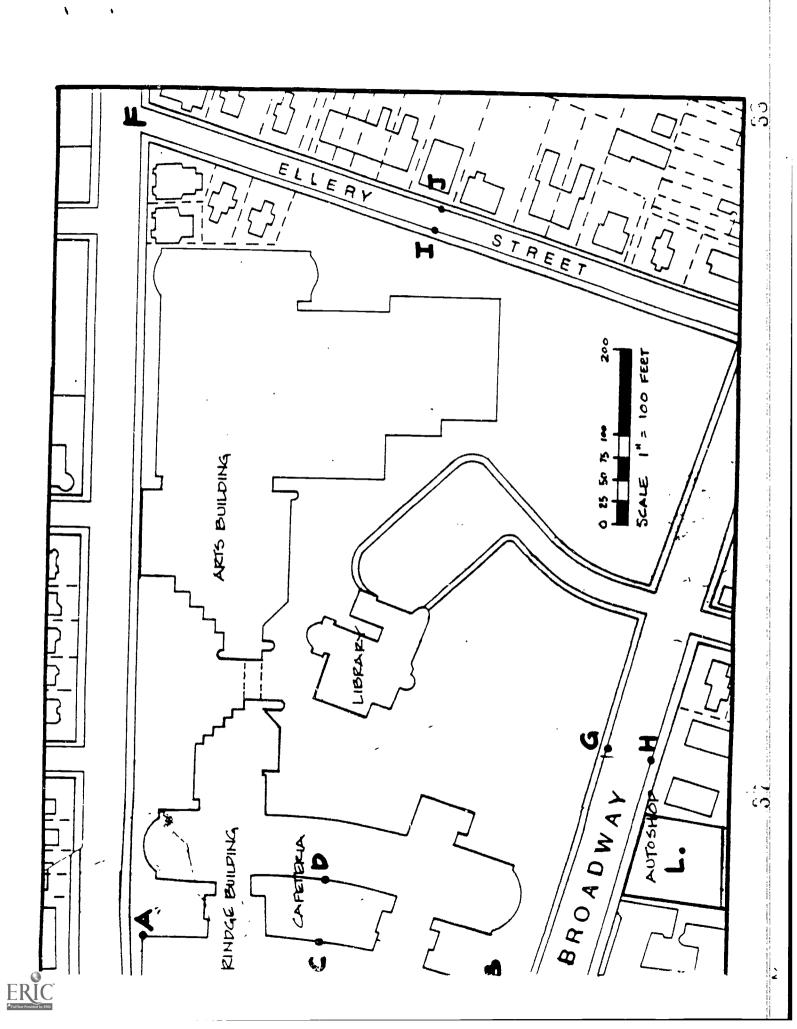
- 1. Length of studio _____ paces = ____ feet ____ inches
- 2. Width of studio _____ paces = ____ feet ____ inches
- 3. Width of _____ paces = ____ feet ____ inches opening into studio

After each person in your group has calculated the dimensions of the studio based on their pace, use a tape measure to find the actual dimensions of the studio and see who came closest in their calculations.

- 1. Actual length of studio = _____ feet _____ inches
- 2. Actual width of studio = _____feet _____ inches
- 3. Actual width of opening = _____feet ____ inches

Now use a tape measure to record the actual dimensions of the items listed on the estimate handout. How close were your estimates to the actual measurements?





CAMBRIDGE TROLLY TOUR

IN THE WALK AROUND THE BLOCK UNIT YOU AND YOUR TEAM INVESTIGATED THE NEIGHBORHOOD IMMEDIATELY SURROUNDING THE HIGH SCHOOL. NOW YOU WILL BE GOING ON A TROLLY TOUR OF CAMBRIDGE AND SEEING SOME OF ITS' "HISTORIC" NEIGHBORHOODS. WHETHER OR NOT YOU ARE ALREADY FAMILIAR WITH THESE PARTS OF THE CITY, YOU WILL BE SURE TO FIND OUT SOME NEW AND INTERESTING INFORMATION ABOUT THEM.

HERE IS A SHORT QUIZ TO START YOU THINKING ABOUT THE CITY SEE IF YOU CAN GUESS THE ANSWERS TO ANY OF THE FOLLOWING QUESTIONS:

- WHEN CAMBRIDGE WAS FIRST SETTLED IN 1620 WHAT WAS ITS' NAME ?
- 2. HOW MANY PEOPLE LIVE IN CAMBRIDGE?
- 3. WHAT PERCENTAGE OF THE PEOPLE WHO LIVE IN CAMBRIDGE ARE UNDER 18 YEARS OLD ?
- 4. CAMBRIDGE IS RACIALLY AND ETHNICALLY DIVERSE. WHAT PERCENTAGE OF THE PEOPLE WHO LIVE IN CAMBRIDGE ARE:

WHITE?

HISPANIC?

NATIVE

AMERICAN?

BLACK?

ASIAN?

- 5. WHAT ARE SOME OF THE MAJOR NATIONALALITIES REPRESENTED BY PEOPLE WHO LIVE IN CAMBRIDGE ?
- 6. WHAT PERCENTAGE OF THE PEOPLE WHO LIVE IN CAMBRIDGE ARE STUDENTS?
- 7. WHAT PERCENTAGE OF THE PEOLE WHO LIVE IN CAMBRIDGE WORK IN THE TRADES?



CAMBRIDGE TROLLY TOUR - QUIZ ANSWER SHEET

IN THE WALK AROUND THE BLOCK UNIT YOU AND YOUR TEAM INVESTIGATED THE NEIGHBORHOOD IMMEDIATELY SURROUNDING THE HIGH SCHOOL. NOW YOU WILL BE GOING ON A TROLLY TOUR OF CAMBRIDGE AND SEEING SOME OF ITS' "HISTORIC" NEIGHBORHOODS. WHETHER OR NOT YOU ARE ALREADY FAMILIAR WITH THESE PARTS OF THE CITY, YOU WILL BE SURE TO FIND OUT SOME NEW AND INTERESTING INFORMATION ABOUT THEM.

HERE IS A SHORT QUIZ TO START YOU THINKING ABOUT THE CITY SEE IF YOU CAN GUESS THE ANSWERS TO ANY OF THE FOLLOWING QUESTIONS:

- 1. WHEN CAMBRIDGE WAS FIRST SETTLED IN 1620 WHAT WAS ITS' NAME ? (New Towne)
- 2. HOW MANY PEOPLE LIVE IN CAMBRIDGE? (95,802)
- 3. WHAT PERCENTAGE OF THE PEOPLE WHO LIVE IN CAMBRIDGE ARE UNDER 18 YEARS OLD? (14%)
- 4. CAMBRIDGE IS RACIALLY AND ETHNICALLY DIVERSE. WHAT PERCENTAGE OF THE PEOPLE WHO LIVE IN CAMBRIDGE ARE:

WHITE? (65.3%) HISPANIC? (7%) NATIVE
BLACK? (13.5%) ASIAN? (8.4%)

NATIVE
AMERICAN? (0.3%)

- 5. WHAT ARE SOME OF THE MAJOR NATIONALALITIES REPRESENTED BY PEOPLE WHO LIVE IN CAMBRIDGE? (Irish 17%, English 12%, Italian 9%, Portuguese 9%, German 4%, and Russian 4%) (Since 1980 the largest influx of residents has been from Haiti, Portugal, CApe verde, Brazil, and the countries of Central America and Souteast Asia).
- 6. WHAT PERCENTAGE OF THE PEOPLE WHO LIVE IN CAMBRIDE ARE STUDENTS ? (25%)
- 7. WHAT PERCENTAGE OF THE PEOLE WHO LIVE IN CAMBRIDGE WORK IN THE TRADES? (16%)



 $\{\cdot\}$

5								
4								
m								67
7								
1								
Date: Location:	Questions:	5.					4.1	

Interviewing Skills



As part of your investigation of the neighborhood around CRLS, you will interview people who walk by or who work in the stores in the area. An interview is a conversation in which one person asks another person questions in order to find out specific information.

Interviewing is a skill you develop with practice. It is not always easy to get a stranger to talk to you! One thing that will help is to wear a badge that identifies you. But it also helps to be polite, friendly, self-confident, and well-prepared. You will need a good set of questions, a clipboard, paper and a pencil for writing down the answers.

Today, you will have a chance to practice interviewing someone. The point of the interview is to find out what the person knows about the neighborhood around CRLS. Use the questions below and add two of your own.

- 1. What four or five words or phrases would you use to describe the neighborhood around CRLS?
- 2. What places in the neighborhood do you go to most often?
- 3. What do you know about the people who live in this neighborhood?



nage

Interviewing Skills (cont.)



(turn to other side for more questions)
4. How does the neighborhood around CRLS compare to the neighborhood where you live?

5. Would you want to live near a high school? Why or why not?

6.

7.



Sights Exercise.



Now lets take a closer look at the sights which make the particular city block that your group has been studying different from the other blocks nearby.

Your task is to go to your study block and take 10 photographs which you think will show other people the most important features of the block. The pictures could show:

```
particular buildings.....(houses, stores, etc.,)
street furniture ...........(street lights, street signs, mailboxes,
benches, etc.)
natural features........(trees, planting, parks)
hang-out places.........(where people congregate)
people..........(who typically use the street)
unusual features.........(building details, paving patterns,
landmarks, etc.)
```

Discuss with your partner(s) what photographs you would like to include before you take any pictures. Remember that you can only take 10 pictures. When you return to your studio you and the rest of the people in your team will vote on which 6 out of the 10 pictures should be used for the final presentation board.



Sounds Exercise - List



Choose four differnt locations on your student hat your hear. LOCATION 1:	dy block and list the sounds
LOCATION 2:	
LOCATION 3:	
LOCATION 4:	
List the three most common sounds that you heard on your study block.	
List the strangest or most unusual sound that you heard on your study block.	



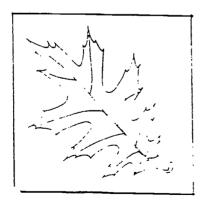
TREE FIELD GUIDE

WHEN YOU ARE ON YOUR WALF AROUND THE BLOCK YOU WILL BE LOOKING FOR O FFERENTININGS OF TREES. THE FOLLOWING DRAWINGS SHOW WHAT THE LEAVES LOOK LIKE FOR 4 OF THE MOST COMMON TYPES OF TREES. SURROUNDING CRUS. SEE IF YOU CAN SPOT THEM.

1 MAPLE



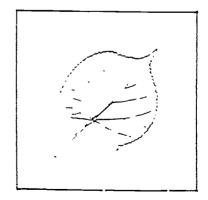
3 RED DAK



3 HONEYLOCUST



4 _ NOEN





14. C	List the names of the two kinds of cars most commonly found parked on the block. Are they foreign or domestic?)	
n ti N u	Are there a lot of pedestrians that use the plock? Look down the block and count how nany people (aside from your fellow students) hat you see during a five minute period. Maker sure that someone in your group ses their watch to time the five minutes arefully.	
Li	riefly describe the different kinds of people hat you saw. How old were they? How are ney dressed? What are they doing etc.?	
7. Li of	ist the two best or most interesting features the block.	
— 3. Li	st the two worst features of the block.	
). W W	ould this block be a good place to live? Thy or why not?	
ιο	id anything unusual or interesting happen you or your team while you were filling out e inventory?	



<u>inven</u>	tory Form (cont'd)	
5. Esti the s	mate (do not measure!) the width of	
on t	v many stories is the tallest building he block?	
Hou Esti:	many stories is the shortest? mate the height of the tallest building?	
List are n	four different materials that the buildings nade of.	
List on th	the 3 most common colors of the buildings he block.	
-Do g	you see any graffiti on the block? Where?	
. Are i	there any places where people gather on the k? If so, what kind of people, and where?	
0. Cour block	nt how many trees that you can see on the k.	
of th	the names of at least two different kinds ees that you can see on the block. (refer to guide on trees.)	
Stan. vehic	ere a lot of vehicular traffic on the block? d in one place and count how many cles (cars, trucks, and buses) go by you in nutes.	
	nt how many cars are parked on the block.	



Walk Down the Block Inventory Form



In the previous exercise we made observations about a street on our area map. We will now be looking at the same section of street in order to create an inventory list of the streets characteristics. Divide the team into two groups to do this exercise. At the end the groups will compare answers. Take a moment before starting to fill out the inventory to read through each question and decide on a stretegy for answering them. Each group will need a clip-board, a pencil, a tape measure, a wristwatch, and this inventory form.

1.	Put a check mark next to the kind of buildings which can be seen on the block: Residential (houses or apartments) Commercial (stores or businesses) Public (Health care, government, and community services etc.) Educational (schools)
2.	Are there any places on the block where people work? Make a list of any stores or businesses that are on the block.
3.	List at least three different kinds of jobs that people perform on the block.
4.	Using your tape, measure the following items. (Record all measurements in feet and inches.) - The sidewalk (width) - A typical driveway (width) - A fire 1ydrant (height) - An item of your choice. (specify)



Observation Form



There are no right or wrong answers in this exercise, we are just interested in what you notice about the block. If you are not sure what to look for, here are some ideas; sights, sounds, colors, types of buildings, building materials, types of people, cars, etc.. See what you can observe!

Observation List:

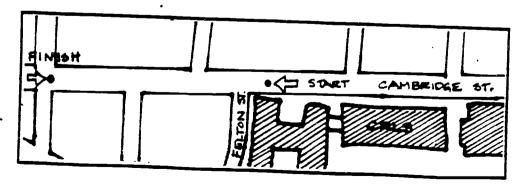


Observation Exercise



Now that you and your team are familiar with some of the streets surrounding the High School you will be exploring one particular street in more depth. This is an observation exercise which will require a lot of concentration. You will each need to bring along your clipboard, a pencil, and an observation form to fill out.

At the bottom of this page is a map showing a section of a street. From the area map which you used for the previous exercise, locate the street section and walk to it with your team members. Beginning at the starting point indicated on the map, you will have 10 minutes to walk to the finish point and back. Observe the things which you think are most important about the street. These things could be; sights, sounds, shapes, colors, buildings, types of people, cars, etc.. Do not write anything down until the 10 minutes are up and you have returned to the starting point.



Observation Map



TEACHERS GUIDE

NEIGHBORHOOD INVESTIGATION-

Preparing Students to Investigate the Neighborhood Around CRLS

- 1. Use the Cambridge map to show students the area around the school that they will investigate and also to point out the areas that other work teams will be investigating.
- 2. Ask students to find on the map the part of the neighborhood around the school that they go through on their way to school. You could also ask them (if they have not already done this) to each mark the whole route they follow when going from home to school.
- 3. Ask students how they could figure out the distance that they walk (or bike, or drive) from home to school. Hopefully, someone will know about the scale on a map, but if not, you should explain it and then have them use the scale to estimate the distance that they go.
- 4. Finally, ask students to write down everything they have noticed about the neighborhood around the school from walking through part of it every day on their way to school. Can they come up with (Are there more houses or apartment buildings? Are the buildings small or large? Are there trees?





Now use your pace to measure the dimensions of your studio space. Multiply the number of paces for each dimension by the number of feet and inches in your pace to find the measurement in feet and inches. 1. Length of studio _____ paces = ____ feet ____ inches 2. Width of studio _____ paces = ____ feet ____ inches 3. Width of _____ paces = _____ feet _____ inches opening into studio After each person in your group has calculated the dimensions of the studio based on their pace, use a tape measure to find the actual dimensions of the studio and see who came closest in their calculations. 1. Actual length of studio = _____feet _____ inches 2. Actual width of studio = _____feet _____ inches 3. Actual width of opening = _____feet _____inches Now use a tape measure to record the actual dimensions of the items listed on the estimate handout. How close were your estimates to the actual measurements?

Pacing Exercise



All things are measured using specific "units of measure." For example: liquids are measured using cups, quarts and gallons; weight is measured using ounces, pounds, and tons; and distances are measured using inches, feet, and miles.

Each of us has a built-in unit of measure called our "pace" which enables us to make fairly accurate estimates of distances and dimensions. In this exercise you will be determining your pace in order to measure your studio spaces. Later you can compare your measurements with the actual measurements by using a tape measure or yard stick. After determining the actual measurements you will be drawing a "birds eye view" or plan of your studio space with the furniture in it.

DETERMINE	YOUR	PACE:
-----------	------	-------

WRITE YOUR PACE HERE: Stand against a wall and take	1 step = 6	104
Stand against a wall and take t		inches

Stand against a wall and take three average steps. Measure how far you have gone. Divide this measurement by three. This is your "pace." Everyone's pace is different.

Recheck your measurements by repeating the above steps. Is the number close to your first pace measurement?

For your work to be as accurate as possible, you will need to make your "pace" the same for every measurement.

(exercise continues on other side of page)



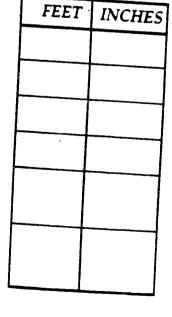
Walk Down the Block Estimating Exercise



Measuring is the process of determining the dimensions or the amount of something. Estimating measurements means guessing the dimensions of a particular object or the amount of a particular material. In many industries and trades its important to know how to estimate dimensions. When you investigate the blocks around the school you will be asked to estimate the height and width of buildings and objects. The best way to learn how to estimate well is by practicing. This will help you get to know the typical dimensions of things.

For this exercise estimate the dimensions (in feet and inches) of the things listed below. After you make your estimates we will determine what the actual dimensions are and compare them with your guesses. Write your estimates in the space provided.

- 1. The height of your studio wall partitions.
- 2. The length of your studio.
- 3. The width of your studio.
- 4. The height of your studio tables.
- 5. The distance from floor to ceiling in the CityWorks room.
- 6. The width of the CityWorks room (from the window wall to the other side.)





Pacing Exercise



All things are measured using specific "units of measure." For example: liquids are measured using cups, quarts and gallons; weight is measured using ounces, pounds, and tons; and distances are measured using inches, feet, and miles.

Each of us has a built-in unit of measure called our "pace" which enables us to make fairly accurate estimates of distances and dimensions. In this exercise you will be determining your pace in order to measure your studio spaces. Later you can compare your measurements with the actual measurements by using a tape measure or yard stick. After determining the actual measurements you will be drawing a "birds eye view" or plan of your studio space with the furniture in it.

DETERMINE	YOUR	PACE:
-----------	------	-------

WRITE YOUR PACE HERE: 1 step = _____ feet _____ inches.

Stand against a wall and take three average steps. Measure how far you have gone. Divide this measurement by three. This is your "pace." Everyone's pace is different.

Recheck your measurements by repeating the above steps. Is the number close to your first pace measurement?

For your work to be as accurate as possible, you will need to make your "pace" the same for every measurement.

(exercise continues on other side of page)



ごう

n) (i)

ERIC Full text Provided by ERIC

CITY OF CAMBRIDGE, MA

F

Walk Down the Block Estimating Exercise



	FEET	INCHES
7. The height of your team leader.		
8. The height of two of your teammates:		
name		
name		
9. The length of the CityWorks room (from the front entry to the back of the room).		

Now that you have made your estimates, compare them to those of your teammates and see who you think came the closest to guessing the real measurements. How did you make your guesses?

Don't take the actual measurements just yet. First we will be doing a pacing exercise that will help you to make more accurate estimates.



Sample Presentation Board

•	Boura
Street Map (shows study block in relation to CRLS)	Photographs
Sketches of Buildings	Observations
Sounds List	Interviews
Map Legend Street In	pentoru Man

(shows all symbols used)

wentory Map

(Shows location of buildings and other important things on study block)



CAMBRIDGE TROLLY TOUR MAJOR SIGHTS AND POINTS OF INTEREST

- 1 HARVARD UNIVERSITY AND HARVARD YARD.
- 2. CHRIST CHURCH
- 3. CAMBRIDGE COMMON.
- 4. CAMBRIDGE CEMETARY
- 5 BRATTLE HOUSE
- 6. LONGFELLOW MANSION
- 7. MT. AUBURN CEMEMTARY
- 8. KENNEDY SCHOOL OF GOVERNMENT
- 9. CHARLES RIVER
- 10. M.I.T.
- 11. KENDELL SOUARE
- 12. CAMBRIDGESIDE MALL
- 13. CAMBRIDGE COURTHOUSE
- 14. ROOSEVELT TOWERS
- 15. INMAN SQUARE
- 16. YOUVILLE HOSPITAL



This is CityWorks

Teammate Interview Exercises (cont.)



- 3. Now talk to your partner and decide on at least two things that you have in common with each other. This could be anything, for example: where you live; the color of your hair; your favorite music; etc. Write down your answers below.
- 4. Return to your group. Use the Polaroid camera to take a picture of your partner. The picture can show just your partners face (a portrait), or show their whole body. They can make any kind of pose that they wish.
- 5. Look at the map of Cambridge and work with your partner to try to locate each of your streets and houses. Put a pin on the map to show where your partner's house is located. Pin their picture to the edge of the map closest to where they live.
- 6. Now it's time for the introductions. Begin by telling the group your partner's name and pointing out where they live on the map. Tell the group how your partner answered the questions.
- 7. If there is time at the end of your introductions, each of you try to draw a line on the map that shows how you get to the high school from your home. Use a colored pencil to trace along the streets which you take to walk, drive or travel by bus on your route to school.



Introduction to Walk Around the Neighborhood - TEACHERS GUIDE

Before going out, take a few minutes to find out what kids already know or think about the neighborhood around the school.

- 1. Which streets do they walk down on their way to or from school?
- 2. What places (stores, etc.) in the neighborhood do they go do most often?
- 3. Based on what they have noticed on in the streets or in these places, how would they describe the neighborhood? (e.g. what kinds of buildings, what kinds of people live here, if it's similar to or different from where they live). Make a list on the blackboard of everything kids have noticed about the neighborhood around the school.
- 4. Use the Cambridge map to show students the area around the school that they will investigate and to point out the areas that other work teams will be investigating.
- * The point is to try to get kids interested in the investigation they're about to do! Make sure to let them know that this exercise is just the start of a larger investigation of the neighborhood for which they will be doing many different activities and projects. Each studio in CityWorks will be researching their own block near the high school and will be creating maps, models, and presentation boards to present their findings. In the end all the groups will pool their information to create a large group study of the neighborhood. This study will be exhibited in the CityWorks room and possibly in other public spaces in Cambridge.

At this point go outside and start the walk around the neighborhood. If the weather doesn't permit going out. . .

Ask students how they could figure out the distance that they walk (or bike, or drive) from home to school. Hopefully, someone will know about the scale on a map, but if not, you should explain it and then have them use the scale to estimate the distance that they go.

Then move into the estimating, pacing and scale activities.



This is CityWorks

Work Team Group Inventory Form



of :	us currently hold jobs as		
Otherjob	s we have done in the pas	tinclude:	
ofus	regularly help out arour	ed the house by _	
Nhen we'i	re not at school or at wor	k, our main inte	rests and hobbies ar
Ve know po	eople who know a lot abo	out:	
			<u>.</u>
			



This is CityWorks

Teammate Interview Exercises



In the CityWorks course you will be working in teams on a variety of projects. Being on a project team is somewhat like being on a sports team. In order for the team to function well, its important that you really know your teammates. What are they like and what do they like to do?

Complete the following exercises with a partner. You will be introducing each other to the group later so write down everything your partner says that is important to remember.

- 1. Take turns being the interviewer and ask your partner this list of questions. Record their answers as you go along.
 - What is your name?
 - Where do you live?
 - What school did you attend last?
 - How long have you lived in Cambridge?
 - Where else have you lived? (other neighborhoods, cities, countries)
 - When is your birthday? (Do you know your astrological sign?)
 - What is your favorite music group or kind of music?
 - What do you do when you're not in school?
- 2. Make up one question on your own to ask your partner.



CRLS Grounds Exercise



A symbol is something which stands for or represents something else. The 16 symbols on handout 8B stand for places on the CRLS grounds. For this exercise, walk with your team around the school grounds and try to locate as many of the different places as you can in the time that you have. Start at the point labeled on the school map which you receive, then use the map to help you keep track of where you are walking.

When you arrive at a place that is represented by a symbol, identify the place with your group, then draw the symbol on the map where it is located. Try to draw the symbol as neatly as you can so that someone reading the map can tell what it is.

As you walk with your group from place to place, write down on the line next to each symbol (on Handout 8B) one or two activities which people do in the particular place that it represents.





This is CityWorks

Work Team Group Inventory Form



We are a work team of members; are boys and are (Number) girls. Our average age is of us have grown up in Cambridge Other places some of us have lived include: We speak a total of languages, including: If the school had a talent show, our "acts" would include:	Worl	k with your group to fill out the following Group Inventory Form
girls. Our average age is of us have grown up in Cambridge Other places some of us have lived include: We speak a total of languages, including: If the school had a talent show, our "acts" would include:		S -10 up incentory Form
Other places some of us have lived include:	We	are a work team of members; are boys and are [Number]
We speak a total oflanguages, including: If the school had a talent show, our "acts" would include:	girls.	Our average age is of us have grown up in Cambridge
We speak a total oflanguages, including: If the school had a talent show, our "acts" would include:	Other	places some of us have lived include:
f the school had a talent show, our "acts" would include:		
•	We spe	eak a total oflanguages, including:
he most unusual things that we know how to do are:	f the so	chool had a talent show, our "acts" would include:
	The mos	st unusual things that we know how to do are:
		·
		•

Module 1 Page 33



CRLS Grounds Exercise



A symbol is something which stands for or represents something else. The 16 symbols on handout 8B stand for places on the CRLS grounds. For this exercise, walk with your team around the school grounds and try to locate as many of the different places as you can in the time that you have. Start at the point labeled on the school map which you receive, then use the map to help you keep track of where you are walking.

When you arrive at a place that is represented by a symbol, identify the place with your group, then draw the symbol on the map where it is located. Try to draw the symbol as neatly as you can so that someone reading the map can tell what it is.

As you walk with your group from place to place, write down on the line next to each symbol (on Handout 8B) one or two activities which people do in the particular place that it represents.



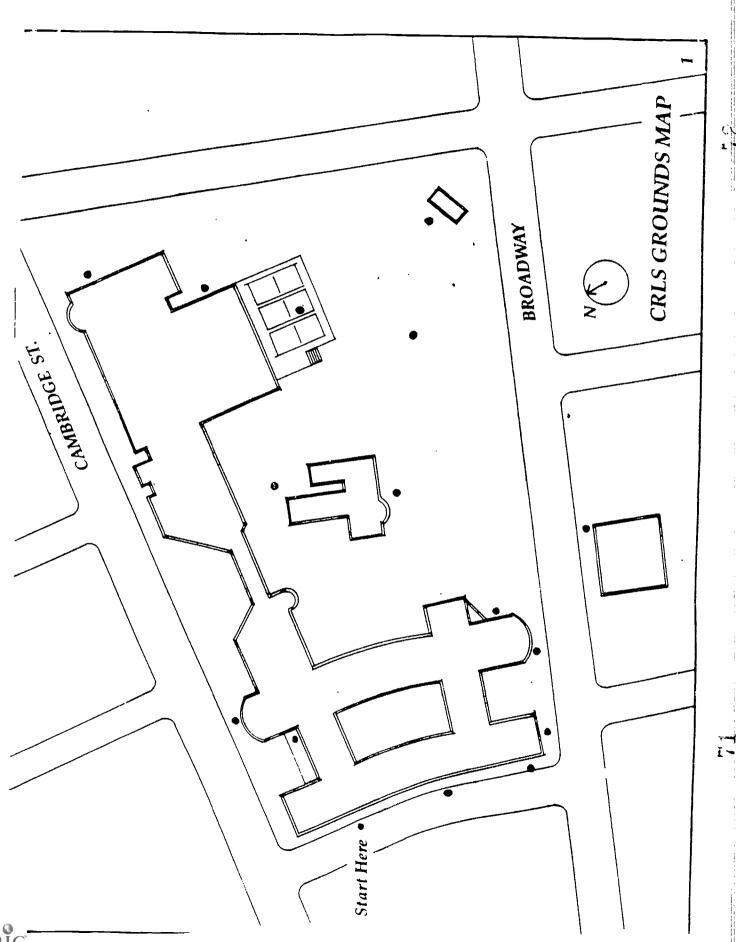
page

CRLS Grounds Exercise - SYMBOLS



1.	9.	
2.	10.	
3. CW	11.	
4.91	12.	
5.	13.	
6.	14. RSTA	
7.	15.	
8.	16.	

page



Walk Down the Block Group Mapping Symbols



Choose some of your favorite symbols that you created for Handout 9B and share them with your team. Decide amongst your group which symbols to adopt as your "group" symbols for the street mapping exercise. Which symbols are the most clear, simplest, and easiest to understand? Once you decide on your group symbol for each item, draw them in the boxes below, making sure that everyone in your work team has the same symbol copied down. Save this sheet as reference for the street mapping exercise.

Traffic Light	Single Family House	Two or Three Family House	Apartment House
Store	One Way Street	Offices .	School Building



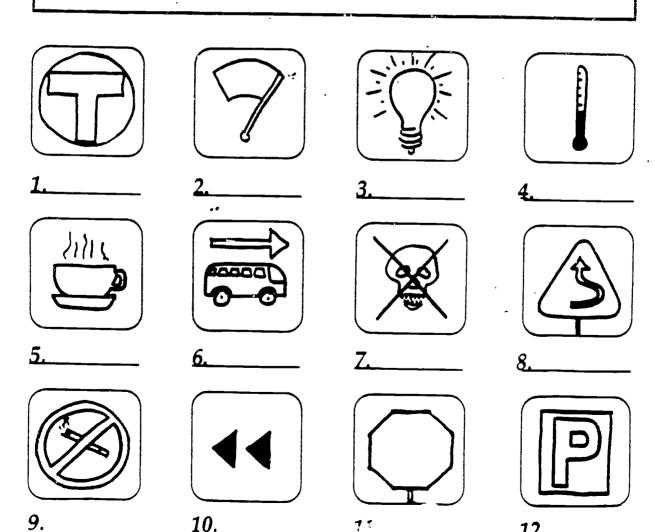
6

Walk Down the Block Symbols



Symbols are things which stand for something else. They can be: pictures; drawings; shapes; letters; or numbers. Symbols are like a language. Anyone can use or read a symbol once they know what the symbol stands for.

Symbols usually show pictures or letters to give you clues about what they represent. The symbols on this page are ones that you may already know. See how many you can identify by labeling each symbol in the space provided. If your not sure what the symbol represents then take a guess!



ERIC

Individual Mapping Symbols



Symbols can be used on maps to represent the things that one finds on a street such as: types of buildings, stop lights, and mailboxes. In this exercise you and your work team will be exploring an area near CRLS and recording information about specific streets. To do this, it will first be necessary for you to make up some symbols which represent the items listed below.

Take some time to make up symbols and draw them in the boxes provided. Remember that symbols usually show pictures which give you clues about what they represent.

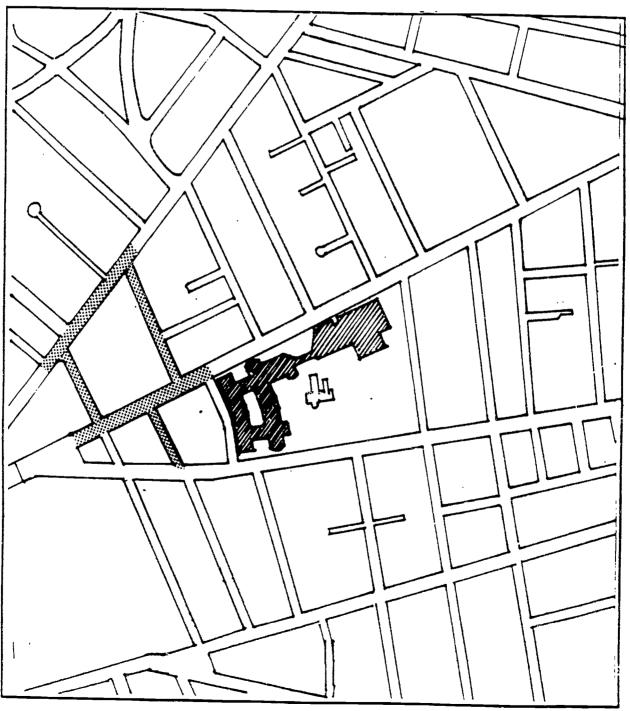
Traffic Light	Single Family House	Two or Three Family House	Apartment House
Store	One Way Street	Offices	School Building

ERIC

Mailhor

Street Mapping Exercise





MAP 1

ERIC

TEACHERS GUIDE

OBSERVATION SKILLS

Preparing students for the observation exercise

- 1. Explain to students that most people walk down the street without noticing very much around them. The first step to finding out more about a neighborhood is to try to notice as much as possible—to see, to hear and to remember what you see and hear. Today we will practice using observation skills.
- 2. Pair students up. Give one of them a pencil and sheet of paper and tell the other one to close his/her eyes. Student who have closed their eyes should then tell their partners what everyone else in the group is wearing—the colors, kinds of fabric, etc. They should also say who in the group wears glasses and who is the tallest. The partner writes down everything. Then students can open their eyes, look around, and compare their answers to the reality.
- 3. Now the students who did not close their eyes should tell their partners everything they can remember about what is on the walls of the CITYWORKS room.
- 4. Ask students to discuss whether they found this exercise to be easy or difficult.
- * Another observation exercise you could try with your students is to have them make a list of everything that they can remember about certain areas of the school which they spend time in everyday such as; their homerooms, the school entryway, and the cafeteria. Observations could include colors, what's on the walls, lavout of the room, etc.. After they make the list tell them to look at the space the next time they get a chance and compare what they were able to remember with what's actually there.



Walk Down the Block

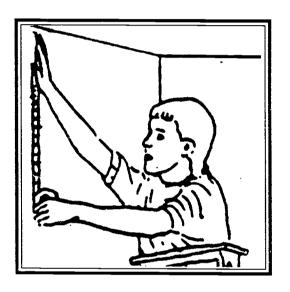
Street Mapping Exercise



Use the symbols that your group created on Handout 9C to record the items and types of buildings which can be found on each of the 5 streets highlighted on your teams' street map. Write the street's name in the box on the left, then draw the appropriate symbols for that street in the box on the left. Draw your symbols as clearly and neatly as possible.

1. <u>Street Name</u>	<u>Symbols</u>			
2. Street Name	Symbols:			
			-	
3. Street Name	<u>Symbols:</u>			
4. Street Name	<u>Symbols:</u>			
			•	
F C				
5. Street Name	<u>Symbols:</u>			
_		78		
<u> </u>		<u> </u>		

City WORKS



Module Three

Exploratory Projects

City Works Shop Tours

Shop Tours - December 9th through 20th

Over the next two weeks you and your CityWorks team will be visiting many of the shops that are part of the Rindge School of Technical Arts. During these shop tours you will see the space in which the shop is taught, learn about the tools of the trade, and talk about the kinds of jobs and careers that are related to each industry. You will also have the opportunity to see how many of the skills which you have been learning in CityWorks such as measuring, layout, symbol making, and team work relate to the various shops.

You will be seeing each of the shops taught by the teachers in your CityWorks classroom as well as those of teachers from other CityWorks classrooms. Report to your CityWorks studio at the beginning of class to meet your teacher for the day. Your grade for this section will be based on your attendance as well as your effort, attitude, and cooperation while visiting the shops.

After Christmas vacation you will be spending two months doing exploratory projects for CityWorks within several of the different shops.



80

DRAFT

CITYWORKS: EXPLORATORY PROJECTS

- A. THERE WILL BE 3 EXPLORATORY PROJECT CYCLES. EACH WILL LAST 3 WEEKS. THE FIRST WILL BEGIN IMMEDIATELY AFTER CHRISTMAS VACATION, ON MONDAY, JANUARY 6, 1992.
- B. IN DECEMBER, CITYTEAMS WILL REDISTRIBUTE STUDENTS FROM STUDIO GROUPS AND ASSIGN TO EXPLORATORY PROJECT GROUPS.
- C. EACH EXPLORATORY IS DRIVEN BY THE CREATION OF A PROJECT, AND ITS PRESENTATION TO THE WHOLE CITYWORKS CLASS ON THE FINAL DAY. EACH TEACHER WILL SUBMIT A ONE-PAGE PROJECT DESCRIPTION, IN DECEMBER, TO THE CITYTEAM BEFORE THE CYCLE BEGINS.
- D. EACH PROJECT WILL, TO THE GREATEST EXTENT POSSIBLE, RELATE TO THE CITYWORKS CURRICULUM.
- E. IN EACH CYCLE THERE WILL BE A 'MID-PROJECT DAY', DURING WHICH STUDENTS RETURN TO THEIR ORIGINAL STUDIO GROUP. STUDIO GROUPS WILL UNDERTAKE ACTIVITIES WHICH REFLECT ON THEIR EXPLORATORY PROJECTS AND SHARE EXPERIENCES.
- F. EACH PROJECT GROUP IS STRONGLY ENCOURAGED TO USE THE CITYWORKS CLASSROOM AT LEAST ONE OTHER DAY PER WEEK IN THE EXECUTION OF THEIR PROJECT.
- G. THE ENTIRE CITYWORKS CLASS, OR ANY EXPLORATORY PROJECT GROUP, IS ENCOURAGED TO GO ON FIELD TRIPS RELATED TO THE PROJECTS AND CITYWORKS [i.e.: TO A BUSINESS WHICH REFLECTS AN INDUSTRY IN CAMBRIDGE.]
- H. EACH EXPLORATORY PROJECT GROUP WILL INVITE A GUEST SPEAKER [PREFERABLY A STUDENT ALUMNUS OF THAT SHOP, OR SOMEONE FROM THAT INDUSTRY.]
- I. ADMINISTRATORS, COUNSELORS, AND OTHER CITYTEAMS (IF FREE) WILL ATTEND EACH CYCLE'S FINAL DAY PRESENTATIONS. [WE WANT TO PROVIDE STUDENTS WITH AUDIENCES FOR THEIR WORK.]
- J. CITYTEAMS WILL REFLECT ON THE EXPLORATORY AND ITS PROJECTS, WITH A VIEW TOWARDS MODIFICATIONS FOR NEXT TIME.



CITYWORKS: JANUARY 6 EXPLORATORY PROTECTION E MON~ JAN 6 TUES WED THU FRI 10 PROJECT \subset 7 7 CYCLES SHOPS AND CITYWORKS ROOM 13 TUE MON 141 WED 151 THU FR1 17 EXPLORATORY PROJECT MID- PROJECT PROJECT PROJECT CYCLE DAY #1 SHOPS & CTYWS AT CTYWKS AT SHOPS & CTYWKS MON 21 WED 22 THU 23 FRI PROJECT HOLIDAY R O 5 E PRESENTATION DAY ×τ SHOPS MD CITYWORKS ROOM CTYWS PAOTECTATION DELEGISTATION MON 27 TUE 28 29 THU FR (WED 31 \subset = R 0 J -1-T SHOPS AT CITYWORKS AMD ROOM MON-FEB TUE WED 5 6 FRI THU EXPLORATORY PROJECT MID-PROJECT TECT JE CYCLE D44 #2 SHOPS & CTYMES AT CTYWKS AT SHOPS & CTYWES MON WED 12 THU FRI TUE PROJECT P P 0 5 Æ. PRESENTATION DAY AT SHOPS AND CITYWORKS ROOM AT CTYWKS MON 17 TUE 18 WED THU 20 FRI Z/ VACATIONS 24 27 TUE 25 26 WED THU FP2(28 ORIENTA TION = P 0 SHOPS AND CITYYYORKS ROOM MOHNMAR 2 TUE WED 72-10 5 FAI 6 EXPLORATORY MID-PROJECT TECT PR 5 0 PROJECT DAY CYCLE #3 SHOPE CTYMS AT CTYWKS AT SHOPS CTYWKS TUE WED MOM 10 // .THU FRI 13 PROJECT P 0 1 P J 7 PRESENTATION 044 CITYWORKS AT SHOPS AT CTYWKS <u>&2</u>

MARCH 13

CITYWORKS: EXPLORATORY PROJECT

Name of Teacher

Name of Project

Exploratory Cycle #

Description of Project

Relationship of Project to Cityworks

Manner of Presentation on Final Day

THE FOLLOWING IS A LIST OF IDEAS FOR PROJECTS THAT YOU MAY WANT TO CONSIDER DOING FOR THE EXPLORATION PROJECT CLOSES. THESE PROJECTS ARE JUST SUGGESTIONS OF ANY SEED APPROPRIATE TO YOUR PART CULAR AREA THEN FEEL FREE TO DEVELOP THEM FLATHER OF YOUR DOOR PLEASE DON'T HESITATE TO SHARE THEM IN CITYTEAM ONOTE See David for ordering any materials which you will need for your exploratory cycle, the sconer the petter)

PROJECT IDEAS

- 5 BuilDING A LIGHT TABLE, we have the piece of glass (approx, 241x36).
- 2 BuilDING THE CITY MAP This involves building a wood frame with a plexi-glass cover to mount a 5 kilo map of Cambridge on the CityMap wall
- 3. CREATE LABELING AND GRAPHICS FOR THE CITYMAP. These grampics could highlight and label specific areas, buildings, and features of Cambridge.
- 4. WIRE CITYMAP FOR LIGHTS. Lights could nighlight specific locations on the CityMap and be keyed to a selector panel.
- CREATE ELECTRONIC SIGNS FOR THE CITYWORKS ROOM.
- 6. CATER THE GALA EXPLORATORY PRESENTION DAY EVENT.
- 7 HAVE A BAKE SALE FOR A NOBLE CITYWORKS CAUSE. Funds could be used for materials or for a specific piece of equipment in the room.
- 8. PREPARE AND PRESENT A MEAL TO A LOCAL GROUP IN NEED. This event could also be videotaped.
- 9. PAINT CITYWORKS AND RSTA LOGOS ON THE RSTA VANS.
- 10 PROVIDE GRILLS FOR THE HVAC DUCTS IN THE CITYWORKS ROOM.
- 11 SILK SCREEN THE CITYWORKS LOGO ON ALL CITYWORKS STOOLS. Or any other equipment and furniture in the room which seems appropriate.



- 12 MAKE NUMBER SIGNS FOR THE STUDIO ENTRANCE WALLS
- 13 CREATE A SYSTEM USING METAL ROOS TO SECURE THE STUDIO WALLS TO THE CELLING AND HELP STABIL DE THEIR
- 14 NSTALL DUPLEX OUTLETS IN EACH CITYWORKS STUDIO
- 15 BUILD STUDIO WALLS AND POSSIBLY DOOR "ENTRYWAYS". This involves building three foot wall sections at each studio opening to stabilize the studio walls. Assuming we agree that we should have goors on the studios, then each studio could have its own entryway theme such as an arch or a gable. This would require us to come up with some goors, preferably panel or solid core please contact David if you know of any
- 16. DESIGNING AND DRAFTING ELEVATIONS OF DOOR "ENTRYWAYS". These entryways could be drawn to scale and actually built.
- 17 DRAFT A PLAN OF THE RESOURCE ROOM Students can come up with ideas and plans for how to develop R125 as the resource room.



Exploratory Project - Portfolio Record

Name:	Shop:
Describe the Exploratory Project(s) you worked on:	Teacher:
Describe what is happening in the photograph.	Glue Picture Here
What did you learn in your Explo	pratory?



	e ?
What are some of the new words which you learned	1?
·	
Did you use math in your Exploratory? If so, how	?
What did you like most about being in this shop?	
Was there anything you didn't like? If so what?	
In what ways can you use the skills that you learned outside of school?	in your life

City Building Work Skills



Name : _____

During the CityWorks exploratory cycles each of you went to three different shops to learn about some of the vocabulary, tools, and skills used in particular trades. You may have discovered that many of the skills that you practiced in CityWorks during the first part of the year, such as measuring and symbol reading, can help you in a variety of different trade areas.

Specific skills and trade terminology used in one shop area may be helpful in other trade areas as well. On the back of this page is a list of many trade skills which workers use in the workplace. In the spaces provided on the right of the page, write the names of the three exploratories that you went to. Look over the list of trade skills and write down, for each exploratory, a list of those skills which you either learned about, used, or think are important in that particular trade area.

Make a list of the trade skills which you either learned about, used, or think are important to know in each of the three shops you visited during the exploratory cycle.

List	of	Sk	il	ls
------	----	----	----	----

- Measuring
- Reading Symbols and Blueprints
- Drawing
- Using Handtools (hammer, screw driver etc.)
- Using Power Tools and Machines (electric drill, saw etc.)
- Concentrating
- Following Safety Rules
- Doing Electrical Wiring
- Soldering or Welding
- Making a Layout Diagram
- Cutting Materials
- Using Math
- Making a Cost Estimate
- Billing a Client
- Talking on the Telephone
- Shaping Metal
- Writing
- Reading
- Understanding Engines/ Motors
- Understanding Electricity
- Sawing

Other skills:

•

•

•

Exploratory #1 Name: _____

Skills Needed:

Exploratory #2 Name: ____

Skills Needed:

Exploratory #3 Name: _____

Skills Needed:

83



City Building Skill Development

Name :	 		
	_	 	



Look over the three portfolio record forms thinking about each of the shops that you weeks, answer the following questions:	s that you filled out and, visited over the past ten
1. Which one of the three trades which you lea exploratory can you most easily imagine you get out of school? Why?	rned about in the CityWorks yourself working in when
2. Do you ever picture yourself owning you not? If so, what kind of business?	rwn business? Why or why
3. Which of the new skills that you learned in used, or do you think that you will use ou	the explor atories have you tside of sc hool ?
4.Are there any shops offered at RSTA would about and didn't get a chance to visit duri ones.?	d you like to find out more ng the exploratory? Which
	• .

CITYWORKS EVALUATION FORM: (March 23-April 10)

Student Name:	
Studio Teacher:	Project Teacher:
This evaluation covers the time peritheir portfolio record from the exploplanning a new enterprise or service	od during which students completed bratories through the first two weeks of efor Cambridge.
Assign each student a rating from 1 below. 1 = Excellent, 2 = Good, 3 = Fa Put a check next to each of the writing	air, 4 = Poor.
WORK HABITS	RATING
Effort	
Attitude	
Cooperation	
CHECKLIST OF ASSIGNMENTS	
Exploratory #1: Portfolio Record	
Exploratory #2: Portfolio Record	
Exploratory #3: Portfolio Record	
Neighborhood Handouts/Sheets	
Location Rating Sheets	
# DAYS ABSENT DURING THIS	
GRADE FOR THIS TIME PERIOR	D:
GENERAL COMMENTS:	



City WORKS



Module Five

Community Development

CityWORKS

CityWorks is a draft curriculum being developed for:

The Cambridge School Department

159 Thorndike St. Cambridge, MA 02141

In conjunction with:

RINDGÉ SCHOOL OF TECHNICAL ARTS

459 Broadway Cambridge, Ma 02139

© CityWorks 1991

Superintendent of Schools
Mary Lou McGrath

Assistant Superintendent for Administration Patrick J. Murphy

Assistant Superintendent for Curriculum and Instruction
Sandra J. Spooner

Executive Director of RSTA Larry Rosenstock

> Written by Adria Steinberg David Stephen

We gratefully acknowledge the teachers and counselors of the Rindge School of Technical Arts for their ongoing assistance and participation in the development of the CityWorks curriculum.



CityWorks First Period: Restaurant Project

During the next 9 weeks each CityWorks class will develop a different business or community service for Cambridge. In early June, CityWorks will have an open house in which all four classes will exhibit their projects to school and community audiences. Projects will include scale models of the businesses, video, slide-shows, and talking robots!

Your group will create a new restaurant that you think could be a successful business in Cambridge. Together, you will pick the site and decide on the type of restaurant and food to be served there. Different task groups will plan the food and dessert menus, obtain building permits and price out materials, design the interior layout and exterior landscaping of the building, research the kinds of equipment that will be needed for the kitchen, plan the sound and lighting systems, and work on the electrical plans.

Your final exhibit will include things like: contractor estimates and completed permit applications, blueprints of the layout of the kitchen and eating space, a scale model of the restaurant, a printed food menu, a printed dessert menu, samples of the food and desserts, plans for the sound and lighting systems, and a presentation board showing interior finishes (for example, wall paper, type of tile or carpet, etc.).

Before getting going on this project it is important for everyone to complete their Portfolio Record Forms from their Exploratory Projects.

Then, for the rest of this week, you will start investigating Cambridge. You will share information about Cambridge neighborhoods and learn about zoning and other city development issues in preparation for beginning your project.



City Works Period 1: Restaurant Project: Please read this and make a first and a second choice.

Be A General (Contractor) Mr. O Brien)

We will be the general contractors for the restaurant job. In other words, we ll figure out what kinds of building materials to use in the construction and what everything will cost, we ll talk to people in City Hall about how to pull a permit, and we ll visit construction sites to get an idea of what else contractors do.

Special of the Day (Chef Joel)

So you want to own or work in a restaurant! This group will expose you to the hows and why of kitchen and menu design. After we decide on the location, size, and theme of the restaurant, we will determine the menu items and prices, and plan the layout of the kitchen and the equipment we will need.

Bread and Chocolate (Chef Ingrid)

It sour job to plan the breads and desserts for the restaurant and to plan the layout of the eating area. We will visit a few restaurants to interview owners and pastry chefs and get information about desserts. Are people eating less these days? Are they more health conscious? Should there be whole grain breads? We will also look at the layout and facilities of restaurants. What should we think about in choosing furniture? How can we make sure customers are comfortable and waiters have room to do their work?

Lights, Sound, Action! (Mr. Petrillo and Mr. Russo)
What makes for a good atmosphere in a restaurant? Lighting and sound are a big part of it. It sour job to design good systems for both. We will go over electrical plans for the restaurant, talk to people in the city and at Edison about permits, and take trips to sound system stores and lighting display rooms to price items

What A Site! (Mr. Carter)

Once we ve decided on a location, we will draw a sketch of the site, and decide where to locate the building on the site, what the building should look like to take maximum advantage of the site (how many stories high, what shape, what kinds of windows, where, etc.) We II work on a scale model of the restaurant.



CityWorks Second Period: CityWorks Museum Project

During the next 9 weeks each CityWorks class will develop a different business or community service for Cambridge. In early June, CityWorks will have an open house in which all four classes will exhibit their projects to school and community audiences. Projects will include scale models of the businesses, video, slide-shows, and talking robots!

Your group will make displays for a CityWorks Museum. It will be one way we introduce RSTA to eighth graders and their families when they visit the high school. In future years, CityWorks classes will continue to add to the Museum.

Your final exhibit will include a number of different exhibits, like: a scale model of the CityWorks Museum, located in the CityWorks room, a working rope-making machine, a group of talking robots, a dictionary of technical language, and a model of a car's headlight and tail light system (that is fully wired).

Before getting going on this project it is important for everyone to complete their Portfolio Record Forms from their Exploratory Projects.

Then, for the rest of this week, you will start investigating Cambridge. You will share information about Cambridge neighborhoods and learn about zoning and other city development issues in preparation for beginning your project.



CityWorks Period Two: Museum Project Exhibit-Making Groups

Read about and indicate your first and second choices:

Tie Me Up

Mr. Peary will work with you on learning what it takes to "invent," plan and make a workable machine using the tools of the welding trade. The end result will be a machine with moving parts that makes rope.

Stop and Go

Mr. Stowell will work with you on making a working headlight and tail-light assembly using the equipment in the auto shop. This will involve drawing up a wiring diagram and hooking up a battery and flasher units. The final model will have working directional, parking, tail, head and stop lights.

Museum Model

Mr. Walsh will work with you on building and construct a working scale model of the CityWorks Museum and studio spaces. We will focus on the different stages involved in building construction by designing new studio spaces to house the exhibits of the Museum.

Talking Heads

Mr. Lividoti will work with you on...

<u>Words for Work</u>

Mr. Newton (and his assistants) will work with students in all of the groups on making a dictionary of technical and "buzz" words for each industrial area represented in the CityWorks Museum. The completed dictionary will contain definitions, illustrations and photographs. Each student in the class will have opportunities to participate in gathering information and working on the finished product. He will also work with students on the tapes for the talking robots.



CityWorks Third Period: Autobody Project

During the next 9 weeks each CityWorks class will develop a different business or community service for Cambridge. In early June, CityWorks will have an open house in which all four classes will exhibit their projects to school and community audiences. Projects will include scale models of the businesses, video, slide-shows, and talking robots!

Your group will create an autobody shop that you think could be a successful business in Cambridge. Together, you will pick the site and decide on the size of your business. Different task groups will: price the equipment and tools needed, develop a business plan, come up with a name and logo for the shop, develop invoices, newspaper ads, etc, design and make a scale model of the shop (including a customer reception area), and design and make a model of the heating and ventilation system.

Your final exhibit will include things like: cost estimates and completed permit applications, blueprints of the layout of the autobody shop and customer areas, a scale model of the autobody shop, a series of ads for the shop, a sign for the front door with the name and logo, and a scale model of the heating and ventilation system (located within the model of the whole shop).

Before getting going on this project it is important for everyone to complete their Portfolio Record Forms from their Exploratory Projects.

Then, for the rest of this week, you will start investigating Cambridge. You will share information about Cambridge neighborhoods and learn about zoning and other city development issues in preparation for beginning your project.



City Works Period 3: AutoBody Shop Project Please read this page and make a first and second choice:

Hard Cash Mr. Delenat

It takes a lot of planning to put together a business like an autobody shop. Well get advice from people who run body shops and then figure out how to make ours better! Well figure out all the equipment we need and what it costs, and find out about all the permits well need. Well also make sure that none of the other groups spend too much of our cash!

Draw It Out (Mr. Dussault)

It sour job to plan the layout of the autobody shop and then build a scale model of it. Well draw out the floor plan, deciding where to locate the equipment, paint booth, etc., and the waiting area for customers. Well do the instrument layouts and detail drawings.

Customer Is Always Right (Mrs. Olsen)

An auto body shop needs customers. The first thing well do is come up with a name for the shop and a logo. Then well make signs, design an ad campaign and come up with slogans for the ads. We are also going to work on the customer reception area, planning the furniture, and interior design.

Breathe Easy (Mr. Sullivan)

One of the most important things about a body shop is the air ventilation system. Well figure out what equipment is needed and what the requirements are for this kind of system. Then well design one for the shop and figure out the sizes of ducts and where to locate them. Well make a scale model of the system to put inside the model of the shop.

CityWorks Fourth Period: Teen Activities Center Project

During the next 9 weeks each CityWorks class will develop a different business or community service for Cambridge. In early June, CityWorks will have an open house in which all four classes will exhibit their projects to school and community audiences. Projects will include scale models of the businesses, video, slide-shows, and talking robots!

Your group will create a teen activity center that you think could attract teens from all over Cambridge. Together, you will pick the site and decide on the overall size and shape of the building. Different task groups will: learn about what current teen centers offer and don't offer, create an activities program that makes teens of all different races and ethnic groups feel welcome, develop plans and models for woodworking and auto repair shops that would be parts of the Center, and develop an overall site plan and model for the Center.

Your final exhibit will include things like: a welcoming sign and entranceway for the front of the center, a printed activities program, plans for outdoor recreational areas, blueprints of the main lounge/recreation area of the Center, a scale model of the Center in its site, and models of the woodworking and auto repair shops.

Before getting going on this project it is important for everyone to complete their Portfolio Record Forms from their Exploratory Projects.

Then, for the rest of this week, you will start investigating Cambridge. You will share information about Cambridge neighborhoods and learn about zoning and other city development issues in preparation for beginning your project.



City Works Period 4: Teen Activities Center

Please read this and make a first and second choice.

A Happening Place

Mr. Ravanist

What makes a good teen center program? Who usually makes the decisions? We ll find out about how other teen centers run and then figure out how to make ours better. We ll come up with a finished printed activities program for our center.

Everybody's Turf

(Ms. Williams)

What makes teenagers feel welcome or unwelcome in a teen center? What could we do to make our center welcoming to people of all races and backgrounds? We will learn about the ways that people get divided and figure out ways to bring them back together.

Hammer and Nail

(Mr. Therrien)

Our Teen Activities Center is going to have a woodworking shop where teenagers can make things for the Center, or things to sell or give away as presents. It sour job to plan the woodworking shop and make a scale model of it.

On the Road

(Mr. Traganos)

Some teens have cars that need lots of repairs to stay on the road. Our Center is going to have an auto repair shop where kids learn basic skills of repair and work on their own and their friends cars. It sour job to plan the auto repair shop and make a scale model of it.

A Site for Sore Eyes

(Mr. Carter)

Once we've decided on where the Teen Activities Center should be, we will make a sketch of the site. Then we'll figure out how to use the site--how to divide up indoor and outdoor space, and what kind of structure will work best on that site. We'll make a three-dimensional site plan, showing the results of all our decisions.

Lay It Out

(Mr. Cunha)

We will design the main lounge-recreation area for the Center, first using sketches and then making blueprints. We ll talk with Mr. Ravanis and Ms. Williams groups to find out what kind of lounge area they want, and what they want in it. Then, we ll design it.



161

Handouts for City Development - Spring Unit

I know that there are a lot of handouts suddenly appearing in the CityWorks room. It's hard to keep track of them, and you may not want, or have time, to use all of them. Here is a listing of each handout along with a brief summary of shat the exercise covers:

CLASS PROJECT DESCRIPTION: A one page description of the class project for each period to let your students know what their final project will include.

SKILL DEVELOPMENT HANDOUT: A one page worksheet with four questions about what students learned about the trades they visited, and what industry they most easily imagine themselves working in.

WORK SKILLS HANDOUT: A one page exercise which asks students to list and compare the various skills they either learned or think are important in each of the shops they visited.

CAMBRIDGE COMMUNITY DEVELOPMENT HANDOUT: A listing of issues having to do with community development which serve as preparation for the presentation by Cambridge Community Development.

ZONING REGULATIONS HANDOUT: A zoning primer which highlights the main reasons for, and types of, zoning regulations. Could be used as preparation for presentation by Cambridge Community Development.

WHAT'S A NEIGHBORHOOD HANDOUT: An exercise which talks about the official neighborhoods of Cambridge and asks students to locate all the nieghborhoods that they know about on a map. There are two maps which go along with this exercise as well as a teachers reference guive with names of 45 different nighborhoods and hangouts in Cambridge.

NEIGHBORHOOD REPORT CARD: An exercise in which students grade various features of their neighborhood from A to F.

TOUR AROUND YOUR NEIGHBORHOOD: A writing exercise in which students describe their neighborhood.

MAPPING YOUR BLOCK: A drawing exercise in which students draw a map of thier street and the important features of their neighborhood.

PERSONAL LANDMARKS: An exercise where students vote on the 5 most important Community and Teen Landmarks which they think should be highlighted on the Wall Map.



City Building

Cambridge Community Development

Name :	
	



Preparation for Community Development Visit.

Discuss with your group some issues around community development such as:

- Who decides the official neighborhoods of Cambridge?
- What are these zones/neighborhoods used for? (School districts, postal districts, voting districts, parking zones, development zones etc.)
- Why is development importatant in a city?
- Why is it important to monitor and control development in a city or town?
- How do people in Cambridge have input into the process of controling development? (Community groups/meetings.)
- What would happen if they built skyscrapers in Cambridge?

Decide on two questions that your group would like to ask people from Cambridge Community Development when they come.





City Building Zoning Regulations



Cambridge, like all cities and towns, divides it's land into areas called "zones". The city government controls what kinds of new buildings can be built in those zones through rules called "zoning regulations". These regulations insure, for example, that big factories are not built in the middle of housing developments, and that skyscrapers are not built in the middle of old historic neighborhoods.

The following is a list of the different kinds of zoning regulations which limit the type, size, and shape of all new buildings in Cambridge.

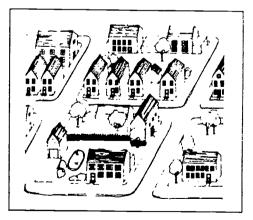
Use Regulations

Use regulations specify which types of land use can be located in each zoning district. There are 5 types of use groups or zones. Sometimes a particular zone allows a variety of uses. The zones are:

Residential Zones - Houses and apartments
Office Zones - Office buildings and banks
Business Zones - Stores, theaters and
restaurants
Industrial Zones - Factories
Special Zones - Mixed - Use

Density Regulations

Density regulations limit the number of buildings which can be built on a piece of land by requiring a minimum number of square feet of lot area per building.



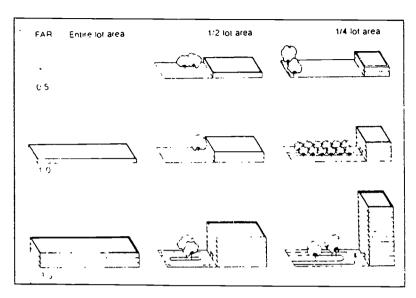
page





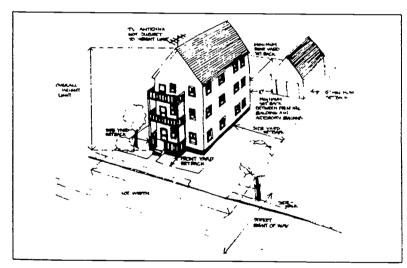
Size Regulations

Dimensional regulations specify the maximum floor area and height of a building as determined by the zone and the size of the lot. The floor area ratio limits how intensively a lot may be built upon, it is the gross floor area of the building divided by the area of the lot.



Height and Setback Regulations

Height regulations limit how tall a building can be, and setback regulations control the distance between the street and lot lines.



Parking Regulations specify the amount of off-street parking required for each type of land use.

Open Space Regulations require that a certain portion of a lot remain open and usable.



City Building

What's a Neighborhood?

Name:	



Most cities are divided into areas, called neighborhoods, which have particular boundaries (edges) and characteristics. Cambridge has "official neighborhoods" or zones which are defined by the city government. There are also many unofficial or "personal neighborhoods" which are defined by the residents of Cambridge.

All neighborhoods have different features such as: types of houses and apartment buildings, stores, parks or playgrounds, schools, community buildings, and hang-out places. In the Walk Around the Block you and your team investigated the neighborhood surrounding the high school. What kind of a neighborhood was it?

In order to find the best locations for your City Building project it will be helpful to know about Cambridge's different neighborhoods and what their main characteristics and features are.

Using the map of Cambridge provided, do the following exercises:

1. Find your street, and the approximate location of your house on the map. Think about the boundaries of what you think of as your "personal neighborhood" or turf. Are the boundaries formed by streets and buildings, or are they imaginary boundaries? Do you think that other people in your neighborhood acknowledge the same boundaries? Use a colored pen or pencil to outline what you think are the boundaries of your neighborhood. The outlined area should include at least your house and street, friends houses, and nearby parks or stores that you use.



colored pencil, outline the neighborhood that you can	ds in Cambridge are there? Using a different boundaries of, then label, each Cambridge think of. Below is a list of some neighbor- d any other neighborhoods that you are
familiar with.	i ung other heighvorhoods that you are
East Cambridge Mid-Cambridge Cambridgeport Avon Hill Porter Square	Riverside Agassiz North Cambridge Cambridge Highlands Strawberry Hill
List Any other neighborhow whether they are "official new are"	oods that you can think of. Think about eighborhoods" or "personal neighborhoods":
Other Neighborhoods	•
Nicknames:	
List some of the some of the Cambridge.	ne nicknames used for neighborhoods in

page

::C 167

Teacher reference guide for Cambridge Neighborhoods (These location descriptions are not necessarily exact or official)

Official Neighborhoods used by Cambridge Community Development (See official neighborhood map)

- 1. East Cambridge From the tracks at Cambridge St. East to Lechmere
- 2. We need to think of a name for this neighborhood
- 3. We need to think of a name for this neighborhood
- 4. We need to think of a name for this neighborhood
- 5. Cambridgeport Central Sq. Mass Ave south to the river, MIT to Lechemere along river
- 6. Mid-Cambridge Central Sq. Mass Ave. north along Prospect, Portland to Somerville
- 7. Riverside Part of Cambrdigeport, Morse School west along river to Weeks Bridge
- 8 Agassiz Borders Md, West, and North Cambridge
- 9. We need to think of a name for this neighborhood
- 10. West Cambridge Harvard Sq. west along Concord Ave. out to Glacken Field and Belment
- 11. North Cambridge Porter Sq. west along Mass Ave. to Alewife North to Somerville
- 12. Cambridge Highlands
- 13. Strawberry Hill

Some Other Cambridge Neighborhoods:

- 14. Alewife Area along Alewife Brook from "Gerry's pit" to Matignon High School
- 15. Avon Hill Part of West Cambridge between Huron and Brattle St.
- 16. Mount Auburn Part of West Cambridge, southern mo t tip
- 17. Observatory Hill Behind Avon Hill, where the Harvard Observatory is located
- 18. Central Sq. Separates Cambridgeport from Mid-Cambridge
- 19. Harvard Sq. Part of Mid-Cambridge
- 20. Porter Sq. Separates Mid Cambridge from North Cambridge to the west
- 21. Kendall Sq. Part of Cambridgeport bordering East Cambridge
- 22. Fresh Pond Part of West Cambridge, western most part of city
- 23. Lechmere Part of East Cambridge, eastern most part of city





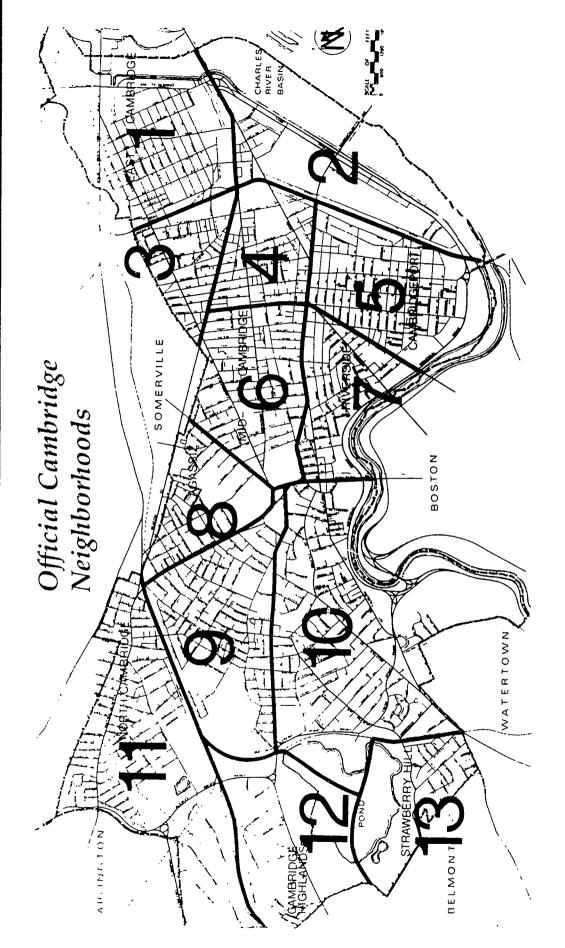
Teacher reference guide for Cambridge Neighborhoods (These location descriptions are not necessarilly exact or official)

Neighborhood Slang and Hangout Places

- 24. The Port Cambridgeport
- 25. The Ave Western Ave., part of The Port or area around The Mission
- 26. The Coast Part of Cambridgeport along the river
- 27. The Mission The teen center at Hoyt Field in Cambridgeport
- 28. The Beach Magazine Beach along the river where the public swimming pool is, was once a beach and the eastern most part of Cambridgeport
- 29. C.B. Corporal Burns Park, along the river by the Weeks Bridge. The coolest place to hang out during the summer
- 30. Trestle The railroad bridge which crosses the river under the B.U Bridge. A big hangout for Cambridgeport kids during summer and on weekends
- 31. Weeks Bridge The walking bridge over the river between C.B. Park and Harvard Square
- **32.** Gold Star The city pool at Donelly Field behind Harrington School, a big East Cambridge hangout during summer.
- 33. The Magg Public pool at Magazine Beach
- 34.Pete's A small variety store on Roberts Rd., a hangout at the high school
- **35.** The Corner A'North Cambridge hangout in front of Cambridge House of Pizza on Mass Ave.
- 36. Matignon A North Cambridge parochial high school, hang out after school
- 37. Little Fresh Asmall pond on the golf course (west side) of Fresh Pond, a big hochey playing area for West Cambridge
- 38. Gerry's Pit The pond behind the Alewife T Station, a big hockey pond for North Cambridge
- 39. Donelly Field Behind Harrington School, a baseball and softball camp during the summer
- 40. Perry Park Part of Xomerville and a big East Cambridge hangout during the summer
- 41. Trash Park Park at the corner of Brookline St. and Putnam Ave., part of the Coast and the Port
- 42. Bum Heaven The railroad tracks behind Roosevelt Towers
- 43. Cockran Park West Cambridge public housing
- 44. J.P. Jefferson Park public housing project, a big summer hangout
- 45. The Court Newtowne Court, public housing in Cambridgeport
- 46. The Elms Washington Elms, public housing in Cambridgeport
- 47. The Towers Roosevelt Towers, public housing in East Cambridge
- 48. The Gardens Putnam Gardens public housing in Riverside

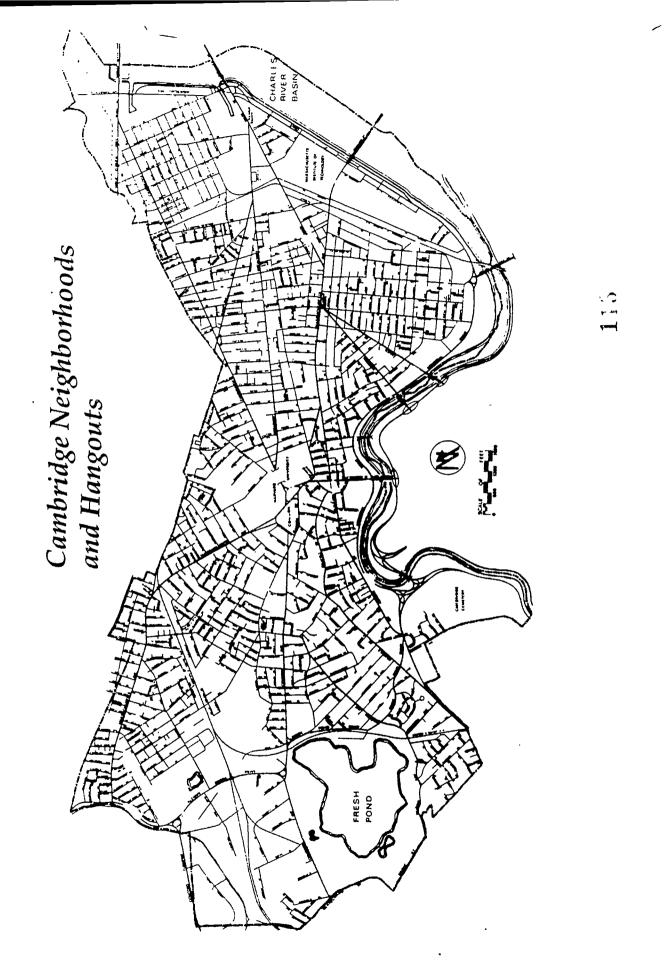


page











-4

City Building Neighborhood Report Card

City WORKS Y
Handout

Name :

When thinking about where to locate your class's building it will be important to know the good points and bad points of each neighborhood in Cambridge. In this exercise, think about your own neighborhood and grade it's features using the report card on the back of this sheet.

Grade Chart

- \boldsymbol{A} Outstanding. This is a great feature of my neighborhood and does not need to be improved.
- \boldsymbol{B} Very Good. Ilike this feature of my neighborhood, although there is room for some improvements.
- CO.K. This feature of my neighborhood is all right, but could be improved quite a bit.
- DPoor. This is a feature of my neighborhood which I do not like and which should be improved.
- F Bad. This is a feature of my neighborhood which is a problem or does not exist.





Neighborhood Report Card Student Neighborhood Name: Name: Neighborhood Comments \mathcal{B} DF **Features** Housing - Houses and apartment buildings are clean, safe, and not too close together. Transportation - The neighborhood is accessible by buses or subway. Stores- There are enough food and clothing stores. Schools - There are good schools nearby. Recreational Facilities Open Space and Parks Parking-There is enough parking. Noise - There is not too much noise. Safety - The neighborhood is safe. Other: Other: Other:



City Building Tour Around YOUR Neighborhood



Name : _____

In order to complete the CityMap it will be necessary to know has much as possible about each of the neighborhoods in Cambridge. If you were giving someone a tour of your neighborhood, how would you describe it to them? Think about the kinds of people who live there as well as any other special characteristics you think are important. Also list at least five of the places and /or buildings which you would point out to them on the tour. Use the space provided below to write your answers.

Name and Location of Neighborhood			
Characteristics of Neighborhood: 5 Important Places or Buildings 1. 2.			
5 Important Places or Buildings			
1.			
2.			
3.			
4.			
5.			



page

City Building Mapping YOUR Block



Name : _____

easy to read. Use symbols to represent the buildings and objects on your map. Label the buildings and streets on your map.						
		·				
Block M	ар					

page

City Building

Personal Landmarks

Name :	



Now that the Graphic Arts exploratory groups have painted the CityMap on the wall, the CityWorks classes will be choosing what landmarks to locate and light up on the map. We want all CityWorks students to have a chance to vote on what landmarks they think are most important for people in Cambridge. Remember that a landmark is something which tells you where you are. A landmark can be: a home, a sign, a monument, a landform, a work of art, a building, a gathering place etc.

Make two lists below of your 5 choices for the most important landmarks in Cambridge. The first list should be of landmarks that you think are important to all Cambridge residents. The second list should be of the landmarks that you think are most important to teens. The 15 landmarks with the most votes in each category will be located on the map and wired so that they light up.

Community Landmarks	Teen Landmarks
1.	1.
2.	2
3	3
4.	4
5	5



Now think of 5 "Fantasy" landmarks that you would like to have in Cambridge if you could. You could have a giant sports stadium for instance, or a lake for swimming in the summer. List your Fantasy landmarks below.

Fantasy Landmarks

1.	 	 	
2			
3.	 	 	_
4.	 	 	
5			

Finally, use the map provided to locate and label all of the landmarks that you listed. Use one color pencil or pen to indicate your Community Landmarks, another to indicate your Teen Landmarks, and another to indicate your Fantasy Landmarks. In the case of your Fantasy Landmarks, locate them where you would like them to go if you had the choice (right near your house if you want to!)

113

Starting a Business - Portfolio Record

What are three or four things that need to be considered when you are picking a location for a new business?
2. What are three or four things to think about when selecting a name for a business?
3. What does zoning have to do with starting a business?
4. What decisions has your task group made so far related to starting the business?
5. If you were going to start your own business, what kind would it be? Why?



e:			
Works project :			
ocation:			
orks builaing project. Use on a scale of 1 to 5 with s that the site would be i ating of 5 means that it w	e the chart on the regard to the fe an excellent pla ould be a terribl	e back of this p catures listed. ace to locate th	age to rate Arating of he huilding
	Works project: cocation: cothat the area shown orks building project. Use on a scale of 1 to 5 with s that the site would be a sting of 5 means that it we	Works project: Location: The that the area shown above is the porks building project. Use the chart on the contact on a scale of 1 to 5 with regard to the fees that the site would be an excellent not a scale of 1 to 5 with regard to the fees that the site would be an excellent not the site would not the site would be an excellent not the site would be an excellent not the site would n	Works project:

ERIC

Location	Excellent	pe		Not Good	ible
Rating Sheet	2 Exg 1	2 pool	9. O.K.	toN 4	G Terrible
Closeness to public transporation.	_				_
Closeness to highway or main roads.					
Availability of parking.					
Reasonable rent or real estate prices. (Compared to other areas in Camb.)					
Distance from competing establishments.					
Convenience of location to customers.					
Other:					
Other:					_
st the two best things about this loca	cation :				
ould you recommend locating your Cire? Why or why not?	tyWorks	; build	ling pi	roject	at thi

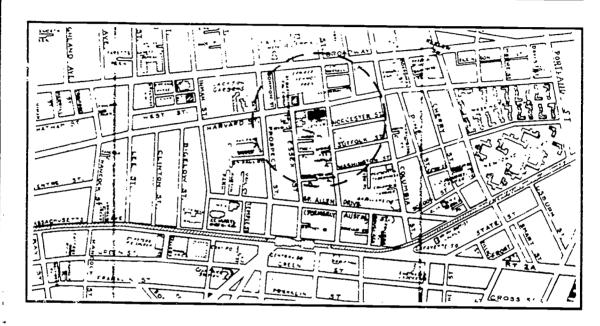


Location Sheet # 1 OF 6 POSSIBLE LOCATIONS

Name:

CityWorks class project :

TEEN CENTER



Site Location: ST. MARYS CHURCH

Imagine that the area shown above is the location for your class' CityWorks building project. Use the chart on the back of this page to rate the site on a scale of 1 to 5 with regard to the features listed. A rating of 1 means that the site would be an excellent place to locate the building and a rating of 5 means that it would be a terrible place. Think about any other features that would be helpful to rate.

ellent	pe		Goor	Terrible
Exc 1	oo 2	3.0.K	oN 4	Lea Ten
		<u>.</u>		
ion :		<u>-</u> .		·
yWorks	build	ing pr	oject i	at thi
	ion:	ion:	ion:	1 2 3 4

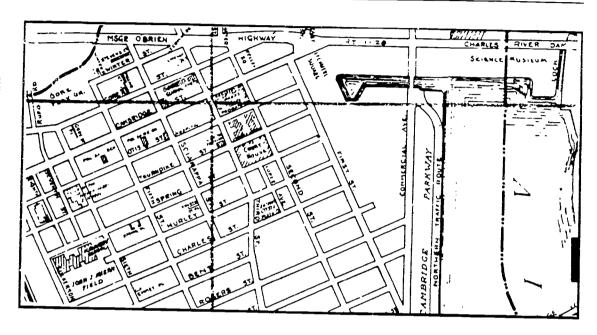


Location Sheet # 1 of 6 POSSIBLE LOCATIONS

Name : _____

CityWorks

class project : RESTAURANT PERIOD 1



Site Location: EAST CAMBRIDGE

Imagine that the area shown above is the location for your class' CityWorks building project. Use the chart on the back of this page to rate the site on a scale of 1 to 5 with regard to the features listed. A rating of 1 means that the site would be an excellent place to locate the building and a rating of 5 means that it would be a terrible place. Think about any other features that would be helpful to rate.



Location	Excellent	Good	O.K.	Not Good	Terrible
Rating Sheet	$\begin{array}{ c c c c }\hline 3 & 1 & \\ 1 & & \end{array}$	2	3	4	5
Closeness to public transporation.					
Closeness to highway or main roads.					
Availability of parking.					
Reasonable rent or real estate prices. (Compared to other areas in Camb.)					
Distance from competing establishments.					
Convenience of location to customers.	_			-	
Other:					
Other:					
st the two best things about this local					
ould you recommend locating your Cite? Why or why not?	tyWorks	- build	ling pı	oject (at thi

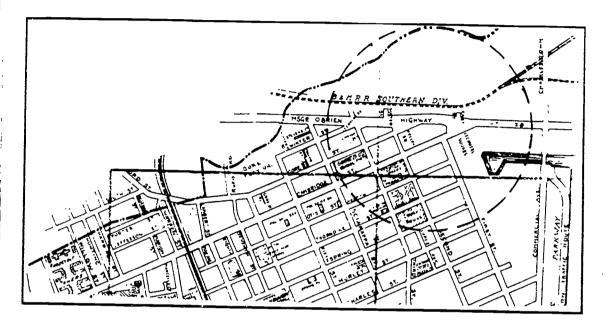


Location Sheet # 1 OF 7 POSSIBLE LOCATIONS

Name:

CityWorks

class project: AUTOBODY SHOP



Site Location: EAST CAMBRIDGE

Imagine that the area shown above is the location for your class' CityWorks building project. Use the chart on the back of this page to rate the site on a scale of 1 to 5 with regard to the features listed. A rating of 1 means that the site would be an excellent place to locate the building and a rating of 5 means that it would be a terrible place. Think about any other features that would be helpful to rate.

Location	Excellent	po	ز ا	Not Good	rible
Rating Sheet	Exc 1	poog 2	3. O.K.	toN 4	G Terrible
Closeness to public transporation.		<u> </u>			<i>J</i>
Closeness to highway or main roads.					
Availability of parking.					
Reasonable rent or real estate prices. (Compared to other areas in Camb.)					
Distance from competing establishments.					
Convenience of location to customers.		_			
Other:					
Other:		_	_		
ist the two best things about this localist the two worst things about the two worst the two worst things about the two worst things about the two worst the two wor	cation :				
Yould you recommend locating your Cit te? Why or why not?	tyWorks	buildi	ing pr	oject a	t thi:



EXISTING AUTO BODY SHOPS in the CITY OF CAMBRIDGE

AUTO BON IMPORTS
14 Decatur Street

AUTOSHINE, INC. 364 Rindge Avenue

B & D AUTO BODY COMPANY 187 Hampshire Street

C & C SPEED & REPAIR 44 Russell Street

CAMBRIDGE AUTO METAL COMPANY, INC. 367 Franklin Street

CAMBRIDGEPORT SERVICE 76 Pearl Street

CHAPPY'S AUTOBODY 47-51 Richdale Avenue

COLLISION AUTO REPAIR, INC. 79 Hurley Street

DELEO'S AUTO BODY & SERVICE, INC. 75 Hamilton Street

EAST CAMBRIDGE AUTO BODY 79 Second Street

HERMES CARRIAGE 125 Brookline Street

HI-TECH AUTO BODY, INC. 162 Alewife Brook Parkway

J & A AUTO BODY & REPAIR
38 Regent Street

J. PAVONE SERVICES
2530 Massachusetts Avenue

SAL'S AUTOMOTIVE SPORTS SERVICE 227 Prospect Street

Captain Ferrazani, Education Officer 349-4900 Ext. 334

Five Rept.

41